



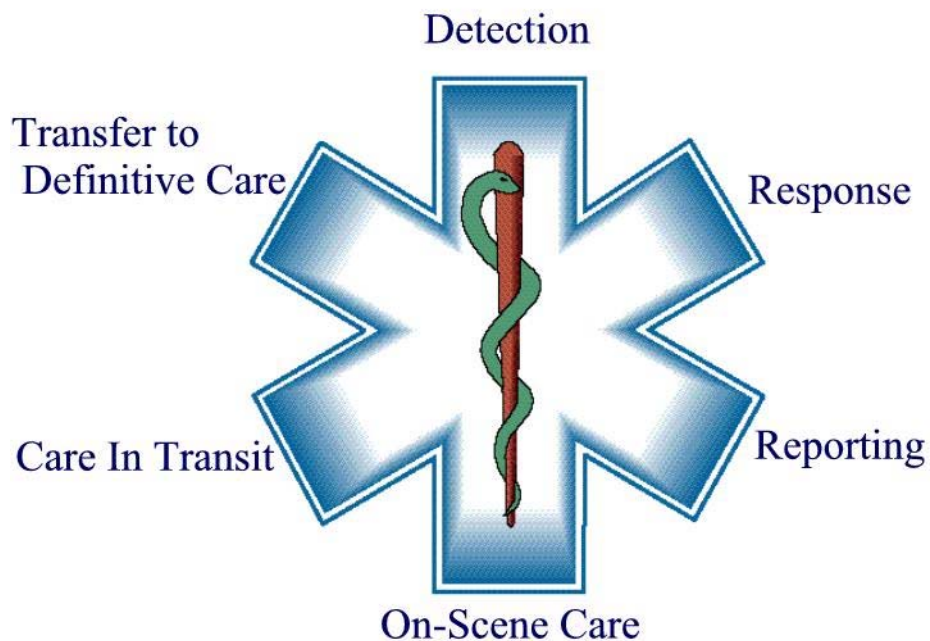
SOUTHWEST GENERAL HEALTH CENTER
Partnering with **University Hospitals Health System**

EMS Services

PRE-HOSPITAL CARE

MEDICAL CONTROL

PROTOCOLS AND PROCEDURES



CIRCULATION / SHOCK	
SHOCK GUIDELINES	
TYPES OF SHOCK	SIGNS AND SYMPTOMS
ANAPHYLACTIC SHOCK	<ul style="list-style-type: none"> • Warm, burning feeling • Itching • Rhinorrhea • Hoarseness / Stridor • Wheezing • Shock • Severe Respiratory Distress • Altered LOC / Coma • Cyanosis • Pulmonary Edema • Facial / Airway Edema • Urticaria / Hives • Dyspnea
CARDIOGENIC SHOCK	<ul style="list-style-type: none"> • Cool, clammy skin • Weakness • Difficulty breathing • Hypotension
HYPOVOLEMIC SHOCK	<ul style="list-style-type: none"> • Tachycardia • Weak, thready pulse • Hypotension with Narrow Pulse Pressure • Hypotension or falling systolic BP • Pale skin • Clammy or dry skin • Dyspnea • Altered LOC/ Coma • Decreased urine output • Restlessness • Irritability
NEUROGENIC SHOCK	<ul style="list-style-type: none"> • Evidence of Trauma (lacerations, bruising, swelling, deformity) • Normal or Bradycardic HR • Hypotension with a Narrow Pulse Pressure • Compromise in neurological function • Normal or flush skin color
SEPTIC SHOCK	<ul style="list-style-type: none"> • Tachycardia • Hypovolemia • Hypotension with a Narrow Pulse Pressure • Dehydration • Altered LOC / Coma • Dyspnea • Febrile / Hx of UTI • Signs of Infection

SHOCK		
History	Signs and Symptoms	Differential Diagnosis
<ul style="list-style-type: none"> • Blood loss - vaginal or gastrointestinal bleeding, AAA, ectopic • Fluid loss - vomiting, diarrhea, fever • Infection • Cardiac ischemia (MI, CHF) • Medications • Allergic reaction • Pregnancy 	<ul style="list-style-type: none"> • Restlessness, confusion • Weakness, dizziness • Weak, rapid pulse • Pale, cool, clammy skin • Delayed capillary refill • Hypotension • Coffee-ground emesis • Tarry stools 	<ul style="list-style-type: none"> • Shock / Vasovagal Syncope • Hypovolemic • Cardiogenic • Septic • Neurogenic • Anaphylactic • Ectopic pregnancy • Dysrhythmias • Pulmonary embolus • Tension pneumothorax • Medication effect / overdose • Physiologic (pregnancy)

GENERAL CONSIDERATIONS:

- Exam: Mental Status, Skin, Heart, Lungs, Abdomen, Back, Extremities, Neuro
- Hypotension can be defined as a systolic blood pressure of less than 100.
- Consider all possible causes of shock and treat per appropriate protocol.

Anaphylactic Shock

- Routine assessment and supportive care of the patient's respiratory and cardiovascular systems is required.
- Do not confuse epinephrine 1:1000 and 1:10,000.
- Treat patients with a history of anaphylaxis aggressively.
- Use caution when using epinephrine for patients over fifty years of age.
- Call Med. Control and use caution when using epinephrine for patients with a heart rate greater than 150 bpm.
- When possible, remove any stingers.
- Consider glucagon for elderly, pregnant and ASHD.

Cardiogenic Shock

- Circulatory failure is due to inadequate cardiac function.
- Be aware of patients with congenital defects.
- Cardiogenic shock exists in the pre-hospital setting when an MI is suspected and there is no specific indication of volume related shock.
- Pulmonary Edema or CHF may cause cardiogenic shock (pediatrics with congenital heart defects may rarely have pulmonary edema).
- Marked, symptomatic tachycardia and bradycardia will also cause cardiogenic shock.

Hypovolemic Shock

- Patients suffering from hemorrhagic shock secondary to trauma, should be treated under the Trauma Criteria, and should be rapidly transported to the nearest appropriate facility.
- Initiate a second large bore IV for all patients in hypovolemic shock.

Neurogenic Shock

- Cushing's Reflex is a sign of increased ICP. Cushing's Reflex is a high blood pressure, low pulse rate, and irregular respirations.

Septic Shock

- Hypotensive patients not in distress do not necessarily require aggressive intervention.
- Be alert for septic shock in the elderly.

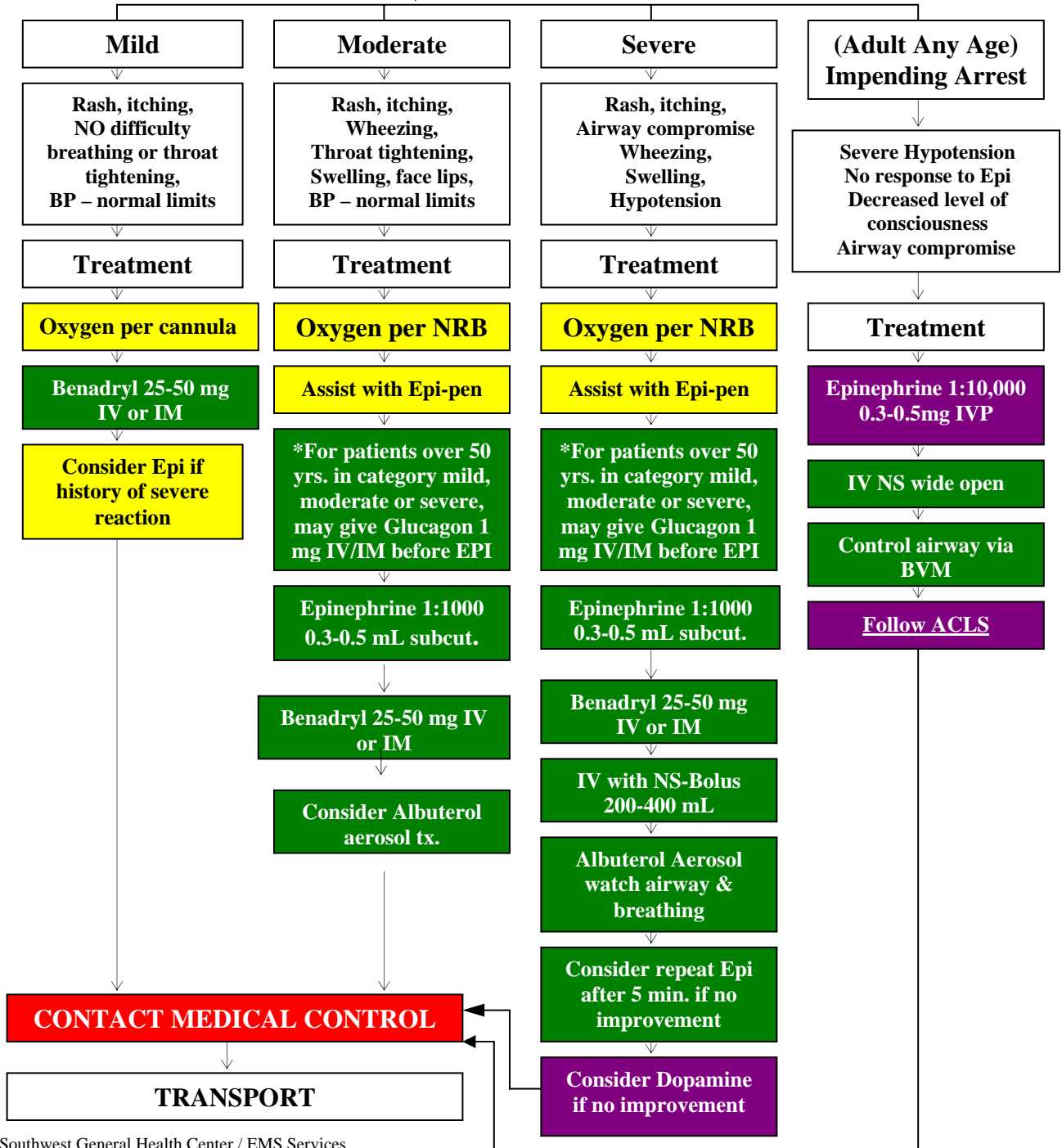
ANAPHYLACTIC SHOCK

B	EMT-B	B
I	EMT-I	I
P	EMT-P	P
M	MED CONTROL	M

UNIVERSAL PATIENT CARE PROTOCOL

IV PROTOCOL

Apply Cardiac Monitor and Assess Vitals



CIRCULATION / SHOCK

CARDIOGENIC SHOCK

UNIVERSAL PATIENT CARE PROTOCOL

**Airway Protocol – Use NRB
Monitor Lung Sounds for Fluid Overload**

IV PROTOCOL

Apply Cardiac Monitor and Assess Vitals

**Pale, cool, clammy, hypotensive
Acute MI in progress
Pulmonary Edema, CHF**

**Dopamine (800 mg in 500 mL in NS D5W)
2 - 20 mcg/kg/min IV
Titrate for increase BP greater than 90
systolic**

Monitor and Reassess BP

CONTACT MEDICAL CONTROL

TRANSPORT

B	EMT-B	B
I	EMT-I	I
P	EMT-P	P
M	MED CONTROL	M

CIRCULATION / SHOCK
HYPOVOLEMIC, NEUROGENIC OR SEPTIC SHOCK

UNIVERSAL PATIENT CARE PROTOCOL
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B	EMT-B	B
I	EMT-I	I
P	EMT-P	P
M	MED CONTROL	M

Hypovolemic Shock

Neurogenic Shock

