Adult Medical Section Protocols

**History**
- Blood loss - vaginal or gastrointestinal bleeding, AAA, ectopic
- Fluid loss - vomiting, diarrhea, fever
- Infection
- Cardiac ischemia (MI, CHF)
- Medications
- Allergic reaction
- Pregnancy
- History of poor oral intake

**Signs and Symptoms**
- Restlessness, confusion
- Weakness, dizziness
- Weak, rapid pulse
- Pale, cool, clammy skin
- Delayed capillary refill
- Hypotension
- Coffee-ground emesis
- Tarry stools

**Differential**
- Shock
  - Hypovolemic
  - Cardiogenic
  - Septic
  - Neurogenic
  - Anaphylactic
- Ecstatic pregnancy
- Dysrhythmias
- Pulmonary embolus
- Tension pneumothorax
- Medication effect / overdose
- Vasovagal
- Physiologic (pregnancy)

**Hypovolemic**
- Spinal Immobilization Procedure *if indicated*
- Normal Saline Bolus 500 mL IV / IO
  - Repeat as needed to effect SBP ≥ 90
  - Maximum 2 L
- Trauma
  - NO
- Wound Care Procedures *as indicated*
  - Control Hemorrhage
- Exit to Multiple Trauma Protocol

**Cardiogenic**
- Right Sided MI
  - YES
  - Spinal Immobilization Procedure *if indicated*
- Normal Saline Bolus 500 mL IV / IO
  - Repeat as needed to effect SBP ≥ 90
  - Maximum 2 L
- Dopamine 2 – 20 mcg/kg/min IV / IO
  - To effect SBP ≥ 90
- Trauma
  - NO

**Distributive**
- Spinal Immobilization Procedure *if indicated*
- Normal Saline Bolus 500 mL IV / IO
  - Repeat as needed to effect SBP ≥ 90
  - Maximum 2 L
- Dopamine 2 – 20 mcg/kg/min IV / IO
  - To effect SBP ≥ 90
- Trauma
  - NO

**Obstructive**
- Spinal Immobilization Procedure *if indicated*
- Chest Decompression-Needle Procedure *if indicated*
- Normal Saline Bolus 500 mL IV / IO
  - Repeat as needed to effect SBP ≥ 90
  - Maximum 2 L
- Dopamine 2 – 20 mcg/kg/min IV / IO
  - To effect SBP ≥ 90
- Trauma
  - NO

**Notify Destination or Contact Medical Control**

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**Protocol 26**
This protocol has been altered from the original 2012 NCCEP Protocol by the Johnston County EMS System Medical Director 2012
Hypotension / Shock

Pearls
- **Recommended Exam:** Mental Status, Skin, Heart, Lungs, Abdomen, Back, Extremities, Neuro
- Hypotension can be defined as a systolic blood pressure of less than 90. This is not always reliable and should be interpreted in context and patients typical BP if known. Shock may be present with a normal blood pressure initially.
- Shock often is present with normal vital signs and may develop insidiously. Tachycardia may be the only manifestation.
- Consider all possible causes of shock and treat per appropriate protocol.
- **Hypovolemic Shock:**
  - Hemorrhage, trauma, GI bleeding, ruptured aortic aneurysm or pregnancy-related bleeding.
- **Cardiogenic Shock:**
- **Distributive Shock:**
  - Sepsis
  - Anaphylactic
  - Neurogenic: Hallmark is warm, dry, pink skin with normal capillary refill time and typically alert.
  - Toxins
- **Obstructive Shock:**
  - Pericardial tamponade. Pulmonary embolus. Tension pneumothorax.
  - Signs may include hypotension with distended neck veins, tachycardia, unilateral decreased breath sounds or muffled heart sounds.
- **Acute Adrenal Insufficiency:** State where body cannot produce enough steroids (glucocorticoids / mineralocorticoids.) May have primary adrenal disease or more commonly have stopped a steroid like prednisone. Usually hypotensive with nausea, vomiting, dehydration and / or abdominal pain. If suspected EMT-P should give Methylprednisolone 125 mg IV / IO or Dexamethasone 10 mg IV / IO. May use steroid agent specific to your drug list.
- For non-cardiac, non-trauma hypotension, Dopamine should only be started after 2 liters of NS have been given.