NON-TRAUMATIC SHOCK
ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

INDICATION
▪ SBP < 100 and signs of shock, suggestive of cardiac origin or after severe vomiting, diarrhea or signs of infection

CRITICAL INFORMATION
▪ Presence of rales. If rales present, see Acute Pulmonary Edema R 5

TREATMENT
▪ ALS RMC
▪ Treat dysrhythmia per protocol
▪ 12-lead ECG if patient has medical history and/or presenting complaints consistent with acute coronary syndrome. If positive for STEMI, see STEMI Policy.
▪ Give 250-500 ml. Recheck vital signs every 250 ml. May give up to two liters fluid.
▪ If lungs remain clear after fluid challenge and SBP remains < 100 then:
  ▪ IV / IO infusion of Dopamine 400 mg/250 ml D5W (pre-mixed). Begin at 10ug/kg/min.
▪ Monitor blood pressure every five minutes. Aim for SBP ≥ 100.
▪ Consider placing multifunction Defib/ Pacer Pads

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SPECIAL CONSIDERATION
▪ Consider other causes of shock and treat as per specific protocols for the following:
  ▪ GI Bleeding
  ▪ Anaphylaxis
  ▪ Tension pneumothorax
  ▪ Vaginal hemorrhage
  ▪ Pulmonary edema
DOCUMENTATION - ESSENTIAL ELEMENTS

- 12-lead ECG finding
- Vital signs pre/post fluid boluses
- History of progression of illness

RELATED POLICIES/ PROCEDURES

- 12-lead Electrocardiogram Procedure ALS PR 12
- Destination Guideline GPC 4
GASTROINTESTINAL BLEEDING
ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

INDICATION
- History of dark, tarry stools, frank bleeding, or vomiting blood, with or without abdominal pain

CRITICAL INFORMATION
- History of previous episodes of gastrointestinal bleeding
- Use of anticoagulant drugs
- History of syncope or falls

TREATMENT
- ALS RMC
- If hypotensive, fluid challenge, 250-500 ml recheck vital signs q 250 ml
- If in shock, start second large bore IV; fluid challenge 500-1000 ml, recheck vital signs q 250 ml
- Shock position if tolerated, keep patient warm

DOCUMENTATION- ESSENTIAL ELEMENTS
- Estimated blood loss

RELATED POLICIES/ PROCEDURES
- Non-Traumatic Shock M 1
ALLERGIC REACTION & ANAPHYLAXIS
ALS
ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

INDICATION
- Urticaria, wheezing or signs and/or shock after exposure to common allergens (stings, drugs, nuts, seafood, medications)

CRITICAL INFORMATION
- Respiratory: wheezing, stridor, respiratory distress
- Skin: itching, hives, rash
- Symptoms indicating early shock such as nausea, weakness, anxiety
- Past history of severe allergic reactions and hospitalizations

TREATMENT
- Mild: hives, rash
  ▪ ALS RMC
  ▪ Benadryl 50 mg IM/IV
- Moderate: hives, rash, mild bronchospasm/wheezes, normotensive
  ▪ ALS RMC
  ▪ Benadryl 50 mg IM/IV
  ▪ Epinephrine 1:1,000 IM 0.01mg/kg (max 0.5 mg)
  ▪ Albuterol 5 mg/6 ml NS via HHN, if indicated for respiratory symptoms
- Severe (Anaphylaxis)
  ▪ ALS RMC
  ▪ Treat dysrhythmias per appropriate protocol
  ▪ High flow O2; advanced airway as needed
  ▪ Epinephrine 1:1,000 IM 0.01mg/kg (max. 0.5 mg)
  ▪ Large bore IV and fluid challenge 250-500 ml; MR
  ▪ If unresponsive/no palpable BP/no palpable pulse: Epinephrine (1:10,000) 0.01 mg/kg IV/IO (max 0.5 mg)
  ▪ Albuterol 5 mg/6 ml NS via HHN, repeat if indicated
  ▪ Benadryl 50 mg IV/IO/IM
  ▪ If hypotension persists after two fluid challenges, begin Dopamine infusion at mcg/kg/min. Monitor BP every five (5) minutes.
DOPAMINE

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400 mg in 250 cc D5W (pre-mixed)  60 drops/min = 60 cc/hr

SPECIAL CONSIDERATION
- Epinephrine may cause anxiety, tremors, palpitations, tachycardia, and headache in the elderly (> 50yrs), and may precipitate AMI, hypertensive crisis and dysrhythmias.
- Confirm proper dilution and dose of Epinephrine prior to administration
- Edema of any of the soft structures of the upper airway may be lethal. Frequently assess and prepare for early intubation.

DOCUMENTATION - ESSENTIAL ELEMENTS
- Pulse oximetry
- Level of distress (mild, moderate, severe) & associated respiratory distress findings
POISONS/DRUGS
ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

INDICATION
- Ingestion and/or exposure to one or more toxic substances

CRITICAL INFORMATION
- Identify substance/drug if possible and amount ingested
- Time of ingestion and length of exposure
- Risk of exposure to field providers

TREATMENT
- ALS RMC
- **Hydrocarbons or Petroleum distillates** (kerosene, gasoline, lighter fluid, furniture polish):
  - Do not induce vomiting.
  - Transport immediately.
- **Caustic/Corrosives** (ingestion of substances causing intra-oral burns, painful swallowing or inability to handle secretions):
  - Do not induce vomiting.
  - Consider dilution with no more than 1-2 glasses of water or milk if no respiratory compromise or change in mental status.
- **Insecticides** (organophosphates, carbonates; cause cholinergic crisis characterized by bradycardia, increased salivation, lacrimation, sweating, muscle fasciculation, abdominal cramping, pinpoint pupils, incoherence or coma):
  - If skin exposure, decontaminate patient, remove clothing, wash skin, avoid contamination of prehospital personnel
  - **Atropine** 2 mg IV slowly. Repeat 2-5 minutes until drying of secretions, reversal of bronchospasm and reversal of bradycardia. Maximum dose 10 mg.
  - If seizures, **Midazolam (Versed)** 2 mg IV slowly; MR in 3 minutes to maximum dose .1mg/kg.
    - For IN: 5 mg (2.5mg in each nostril)
    - For IM: .1mg/kg
- **Cyclic Antidepressants** (frequently associated with respiratory depression, almost always tachycardic, widened QRS and ventricular arrhythmias generally indicate life-threatening ingestions):
  - In the presence of life-threatening dysrhythmias (hemodynamically significant supraventricular rhythms, ventricular dysrhythmias or QRS > 0.10):
    - Hyperventilate if assisting ventilations or if intubated.
    - **Sodium bicarbonate** 1 mEq/kg IVP
    - If seizures, **Midazolam (Versed)** 2 mg IV slowly; MR in 3 minutes to maximum dose .1mg/kg
      - For IN: 5 mg (2.5 mg in each nostril)
      - For IM: .1mg/kg
- **Phenothiazine reactions** (restlessness, muscle spasms of the neck, jaw, and back; oculogyric crisis, history of ingestion of phenothiazine, or unknown medication):
  - **Benadryl** 1mg/ kg slow IVP to max of 50 mg
- **Other non-caustic drugs** (patient awake and alert):
  - If within 1 hour of ingestion, consider **Activated charcoal** 1 GM/kg PO, not to exceed 50 GM
  - If level of consciousness diminishes, protect airway, suggest lateral position with head down.

**DOCUMENTATION- ESSENTIAL ELEMENTS**
- Obtain history of ingestion, substance, amount and time of ingestion, bring sample to hospital if possible
- Vomiting prior to ED arrival

**RELATED POLICIES/ PROCEDURES**
- Seizures N2
SEVERE NAUSEA/VOMITING
ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

INDICATION
- Severe nausea
- Intractable vomiting
- Patients ≥ 4 years of age
- Motion sickness

CRITICAL INFORMATION
- Contraindicated in patients with known sensitivity to Ondansetron or other 5-HT3 antagonists:
  - Granisetron (Kytril)
  - Dolasetron (Anzemet)
  - Palonosetron (Aloxi)

TREATMENT
- ALS RMC
- Ondansetron (Zofran ®) 4 mg ODT/IM or slow IV over 30 seconds; MR x 1 in 10 min
- If nausea due to motion sickness, Benadryl 1mg/kg IM/IV to maximum dose of 50 mg;
  maximum IV rate is 25 mg/minute

DOCUMENTATION- ESSENTIAL ELEMENTS
- Need for antiemetic therapy
SEPSIS

ALWAYS USE BODY SUBSTANCE ISOLATION PRECAUTIONS

INDICATION
- Documented or suspected source of infection AND at least TWO of the following:
  - HR > 90
  - RR > 20
  - SBP < 90
  - Temperature >100.4 or < 96

CRITICAL INFORMATION
- If rales present, see Acute Pulmonary Edema R5 and continue to treat as below.

TREATMENT
- ALS RMC
- Two large bore IVs or IOs (only one may be in antecubital fossa)
- Initiate 20cc/kg fluid bolus. May give up to two liters fluid.
- Early Sepsis Notification
- If SBP < 90 consider:
  - IV / IO infusion of Dopamine 400 mg/250 ml D5W (pre-mixed). Begin at 10ug/kg/min.
  - Monitor blood pressure every five minutes. Aim for SBP ≥ 100.

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DOPAMINE

SPECIAL CONSIDERATION
- Consider other causes of shock and treat as per specific protocols

DOCUMENTATION- ESSENTIAL ELEMENTS
- Suspected source of infection
- History of progression of illness

RELATED POLICIES/ PROCEDURES
- Destination Guideline GPC 4
- Acute Pulmonary Edema R5