Hyperthermia

History
- Exposure to increased temperatures, humidity, or extreme physical exertion
- Time and length of exposure or last seen
- Fatigue or muscle cramping
- Poor oral intake of fluids
- Past medical history
- Medications

Differential
- Fever/Sepsis
- Hyperthyroidism
- Drug induced hyperthermia (NMS – Neuroleptic Malignant syndrome)
- Delirium tremens (DTs)
- Heat cramps
- Heat exhaustion
- Heat stroke

Signs and Symptoms
- AMS
- Hot, dry, and/or sweaty skin
- Hypotension or shock
- Seizures
- Nausea

Presumed infection cause for hyperthermia?

No
- Remove from heat source to cool environment
- Remove tight clothing
- Active cooling measures
- Cardiac monitor
- Establish IV/IO if unable to tolerate PO
  - If systolic BP < 90
    - Normal Saline bolus 500ml IV/IO
    - Maximum 2L

Yes
- Seizure
- Altered Level of Consciousness
- Shock
- Agitated Delirium

Notify receiving facility. Consider Base Hospital for medical direction.

Pearls
- Check an initial temperature and repeat every 15 minutes while actively cooling.
- Extremes of age are more prone to heat emergencies. Obtain and document the patient temperature and location taken.
- Salicylates, antipsychotics, and some recreational drugs may elevate body temperature.
- Sweating generally disappears as body temperature rises above 104°F.
- Active cooling includes: Removal of bulky clothing; wetting patient with water; and air conditioning/fanning; ice packs to the axilla, groin, and neck.
- Intense shivering may occur as a patient is cooled.
- Seizures may occur with heat stroke; treat seizures per seizure treatment guideline.
- With mild symptoms of heat exhaustion, movement to a cooler environment and fanning may suffice. Increasing symptoms merit more aggressive cooling measures.