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

Signs and Symptoms
• AMS
• Hot, dry, and/or sweaty skin
• Hypertension or shock
• Seizures
• Nausea

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

Presumed infection cause for hyperthermia?

SIGNS

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

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.

Effective November 2018

Treatment Protocol E02

Effective October 2019

San Mateo County Emergency Medical Services

For environmental exposure causing hyperthermia (e.g., heat exhaustion and heat stroke); drugs may also be a contributing factor.