



**Toxins & Environmental
HYPERTHERMIA
Practice Guideline**

Patient Care Goals:
 1. Reduce body temperature in a safe manner
 2. Maintain hemodynamic stability

Patient Presentation:
Inclusion Criteria
 Patients may suffer from hyperthermia due to exposure to a hot environment (diminished cooling) or may suffer from a primary illness or injury that, in combination with heat exposure (diminished cooling in combination with increased heat production), leads to hyperthermia

Heat exhaustion
 Sweating, pallor, dizziness, syncope, nausea and vomiting, cramps

Heat Stroke
 Altered mental status with hot/dry/flushed skin

Patient Management
Means of Cooling

- Evaporative Cooling: Dampen the patient with a sponge & water, or mist the skin with water; use a fan to encourage evaporation
- Ice Packs: Apply to groin, axilla, neck, chest wall, behind knees
- Cooled IV fluids: Place bags of normal saline on ice prior to infusion
- *Site-specific cooling (i.e. cold water immersion tank facilitated by on site staff, chilled fluids)

Medication
Normal Saline Bolus (ideally chilled fluids)
 20 mL/kg bolus IV/IO over 10 mins using pressure bag unless signs of heart failure exist
 Second IV/IO if shock continues

Patient Safety Considerations:
 **IF heat stroke is identified, begin cooling prior to transport and ideally utilize site specific cooling if available

Quality Improvement:
 Key Documentation Elements:
 1. Signs and symptoms of hyperthermia
 2. Signs of hemodynamic instability
 3. Patient history, medications, use of alcohol/drugs, other contributing circumstances
 4. Cooling applied, including site specific cooling

