

HYPOTHERMIA

"Wisdom comes with winters." –Oscar Wilde

Hypothermia - Basics

- Abnormally low body temperature
- Normal body temperature 98.6°F (37°C)
- *Mild hypothermia:* 93-95°F (34-35°C), patient shivers vigorously in all extremities. Below 93°F patient develops altered judgment, slurred speech
- *Moderate hypothermia:* 82-90°F (28-32°C), slow breathing, paradoxical undressing may be noted
- At 88°F (31°C) or below, the body loses its ability to generate heat by shivering
- At 86°F (30°C) patients develop higher risk for arrhythmias
- *Severe hypothermia:* 82-86°F (28°-30°C) pupils become dilated and minimally responsive to light, mimicking brain death
- Below 81°F (27°C) most patients are comatose



Prehospital Management

- Minimize motion and avoid jerky movements of severely hypothermic patients as it can trigger fatal heart arrhythmia (ventricular fibrillation) that may be beyond resuscitation. Patients developing hypothermia from cold-water immersion are especially at high risk.
- Attempt rewarming in the field. Gently place patient in an environment most favorable to reducing further heat loss from evaporation, radiation, conduction, or convection.
- Remove wet clothing, and replace it with dry blankets or sleeping bags. Initiate external rewarming with heat packs (eg, hot water bottles, chemical packs) placed in the axillae, on the groin, and on the abdomen but be aware of the risk of causing body surface burns from active external rewarming. Rescuers may provide skin-to-skin contact with patients when heat packs are unavailable.