HYPOTHERMIA

- Routine Medical Care
- Protect the patient from the environment
- If patient is in extremis, begin treatment prior to secondary survey
- Check skin temperature

1. INTRODUCTION: Hypothermia is a reduced core temperature where the cold challenge overwhelms heat production and heat retention factors. The rate of onset can be:
   - 1.1 Acute (minutes to hours) e.g. immersion in cold water
   - 1.2 Sub-acute (hours)
   - 1.3 Chronic (often over several days) Homeless, drug users, alcoholics, and compromised individuals are at high risk. Elderly persons and those taking certain medicines are also at risk. Injured and seriously ill individuals can become hypothermic quickly

   ➔ Note: a hypothermic critical trauma patient has a very high mortality and morbidity rate!
2. SIGNS AND SYMPTOMS OF HYPOTHERMIA:
   - 2.1 Altered mental status including: confusion, mood changes, and speech difficulties. The patient's judgment may be affecting causing him/her to exhibit inappropriate behaviors such as removing clothing
   - 2.2 Decreased motor function, poor coordination
   - 2.3 Diminished sense of cold sensation
   - 2.4 Pupils that respond slowly or sluggishly
3. TREATMENT:
   - 3.1 General:
     - 3.1.1 Remove the patient from the cold environment and prevent further heat loss
     - 3.1.2 Remove wet clothing, begin rewarming - cover with blankets, turn up the heat in the ambulance and place hot packs in the patient's axillae, groin, and neck
     - 3.1.3 Do not let the patient walk or exert him/herself
     - 3.1.4 Administer O2 (warmed and humidified is preferred)
     - 3.1.5 Closely monitor cardiac rhythm
     - 3.1.6 Check blood glucose levels. Administer glucose as needed. (see ALOC **page 30** – adult or **page 56** - pediatric)
     - 3.1.7 Transport immediately
   - 3.2 BLS:
     - 3.2.1 CPR should be initiated if there is any doubt about pulselessness
     - 3.2.2 Severely hypothermic patients may appear dead. If you find an unresponsive, hypothermic patient, take time (30-45 seconds) to try and find a pulse before beginning CPR. Chest compressions should be avoided if any signs of life are present.
     - 3.2.3 If VT or VF is present, defibrillation should be attempted. If one shock is unsuccessful, subsequent shocks should be deferred

3.3 ALS:

3.3.1 Give fluid challenge with heated N.S. if possible

3.3.2 Do not delay urgent procedures (IV lines and intubation) but perform them “gently.” The severely cold heart is sensitive to a variety of stimuli, and fatal dysrhythmias can be caused by forceful treatment efforts

3.3.3 Defer ACLS medications until rewarming occurs (> 30° C/86° F)