

## HYPOTHERMIA

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### **Information Needed:**

- Length of exposure
- Air temperature, water temperature, wind velocity
- Was patient wet or dry?
- History and time of change in mental status
- Medical history: trauma, alcohol, tranquilizers, medical problems (e.g. diabetes)

### **Objective Findings:**

- Altered Mental Status
- Shivering
- Note patient's temperature if possible
- Evidence of local injury: blanching, blistering, erythema of extremities, ears, nose

### **Treatment:**

- Routine Medical Care
- Spinal precautions as necessary
- Remove all wet clothing: dry patient, cover with blankets to prevent further heat loss
- Maintain a warm environment
- IV access
- Cardiac monitoring
- Oxygen as indicated
- For pain from isolated frostbite, consider morphine sulfate 2 - 5 mg slow IVP for discomfort. May repeat morphine in 2-5 mg increments q 5 minutes or more up to 20 mg.
  - If unable to establish an IV up to 5 mg of morphine sulfate may be administered IM. May repeat in up to 5 mg increments q 10 minutes to a max of 20 mg.
  - Prior to the administration of morphine sulfate, and prior to each repeat dose, the patients pain and vital signs should be reassessed. The patient must have a SBP>90 mmHg, respirations>12, and awake to report pain..

### **Precautions and Comments:**

- May need prolonged observation to detect pulse and respirations
- Presenting temperature is less important than cardiovascular status; place patient on cardiac monitor first

- Bradycardia is normal and should not be treated. Even very slow rates may be sufficient for metabolic demand
- CPR is indicated for asystole and ventricular fibrillation, although defibrillation and other treatments may not be effective until the patient is rewarmed. Consider a trial of CPR, defibrillation, advanced airway and cardiotoxic drugs. If no response, continue chest compressions and ventilation and transport patient
- Hypothermic patients should not be determined “dead” until rewarmed or determined dead by other criteria other than undetectable pulse and respiration
- Heat packs with temperatures greater than 110° F should not be used to rewarm patient because of risk of burning skin
- Use extreme caution when moving the patient. Excessive movement of the patient and intubation have been known to precipitate ventricular fibrillation
- Frost bite: do not rub or apply hot packs in the field situation. Avoid thaw and refreeze
- Be aware that wet clothing may not always feel wet to the touch in a very cold environment
- Patients who have stopped shivering may be profoundly hypothermic