Factors that predispose and/or cause a patient to develop hypothermia include: extremes of age, poor nutrition, diabetes, hypothyroidism, brain tumors or head trauma, sepsis, use of alcohol and certain drugs, and prolonged exposure to water or low atmospheric temperature.

Hypothermia patients can be divided into three categories:

- **Mild** (temperature 94-97 degrees F)
- **Moderate** (temperature 86-94 degrees F)
- **Severe** (temperature <86 degrees F)

It should be noted that most oral thermometers will not register below 96 degrees F. However, some tympanic thermometers (Braun Thermoscan™ Pro-1 and Pro 3000) will register from 68 – 108 degrees F (tympanic thermometers should not be used in infants).

**Mild to Moderate hypothermia:** patients will generally present with shivering, lethargy, and stiff, uncoordinated muscles.

**Severe hypothermia:** patients may have altered mental status, ranging from confusion to lethargy or coma. Shivering will usually stop and physical activity will be uncoordinated. In addition, severe hypothermia will frequently produce an Osborn wave or J wave on the ECG, as well as dysrhythmias (bradycardia, ventricular fibrillation).

**Supportive Care**

1. [Trauma Supportive Care Protocol](#) (a).

2. Remove all wet clothes and dry patient.

3. Cover and protect from heat loss and wind chill.


5. Avoid rough movement and excess activity.

7. Add heat to patient's head, neck, chest, and groin.

8. For severe hypothermia, warm IV fluids, if possible.

**For Severe Hypothermic Cardiac Arrest:**

9. Start CPR.

**ALS Level 1**

1. For VF or pulseless VT, defibrillate @ 2 J/kg, 4 J/kg, 4 J/kg.

2. [Intubate](#) and ventilate with warm humidified oxygen, if possible.

3. Establish IV with warm Normal Saline.

**If temperature is above 86 degrees F:**


**If temperature is below 86 degrees F:**

5. Continue CPR and transport immediately. Do not treat dysrhythmias in severe hypothermia (warm patient prior to treatment).

**ALS Level 2 (Physician Authorization Required)**

None
Note

(a) Cases of frostbite should be bandaged with dry sterile dressings and transported without attempting rewarming in the prehospital setting.