



# COLD RELATED EMERGENCIES (HYPOTHERMIA)



## Escambia County, Florida - ALS/BLS Medical Protocol

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Factors that predispose and/or cause a patient to develop hypothermia include: geriatric and pediatric patients, 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.

### **Mild to Moderate hypothermia**

Patients will generally present with shivering, lethargy, and stiff, uncoordinated muscles.

### **Severe hypothermia**

Patients may be disoriented and confused to stupor and 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**

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

Remove all wet clothes and dry patient.

Protect from heat loss and wind chill.

Maintain horizontal position.



Approved: 10/01/2011  
Version: 3.1

Page 1 of 3

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Avoid rough movement and excess activity.

Monitor temperature.

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

8. For severe hypothermia, warm IV fluids.

### **For Severe Hypothermic Cardiac Arrest:**

Start [CPR](#).

Immediate defibrillation if pulseless V-Tach or V-Fib, deliver one shock (monophasic: 360J; biphasic: 120—200J device specific).

### **ALS Level 1**

1. [Intubate](#) as indicated.
2. Establish IV with warm [Normal Saline](#).

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

- 3a. Follow appropriate dysrhythmia treatment.

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

- 3b. Continue CPR and transport immediately. Do not treat dysrhythmias in severe hypothermia (warm patient prior to treatment).

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

None



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Page 2 of 3

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12 Lead EKG with J-wave (arrows shows J-wave)



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Page 3 of 3

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