

Injury or illness from environmental exposure varies depending on the *manner* of exposure (wet or dry) and the *amount* of exposure (time, temperature, wind chill factor, and ambient air). Cold weather emergencies range from localized frostbite to severe hypothermia with unresponsiveness and unconsciousness.

The patient's health and predisposing factors may increase the likelihood of environmental injury or illness. Patient suffering from trauma, shock, hypoglycemia and stroke are at greater risk of developing hypothermia. Newborns, infants, drug & alcohol abuse patients and the elderly have increased predisposition to hypothermia. The primary goal in the treatment of the patient at risk for hypothermia is to insulate the patient and prevent further heat loss.

- **Severely hypothermic patients MUST be handled gently. Avoid any unnecessary airway manipulation or ventricular fibrillation can be precipitated (80-90 °F).**
- **Do not thaw frozen parts in the field if there is a chance of refreezing. Protect frostbitten areas from refreezing.**
- **The presence of delirium, bradycardia, hypotension and/or cyanosis is usually indicative of severe hypothermia**

Legend	
	EMR
	EMT
	Intermediate
	Paramedic
	Medical Control



EMR	<ol style="list-style-type: none"> 1. Handle patient as gently as possible 2. Prevent from further heat loss. 3. Remove from cold and create a warm environment for the patient. Remove wet or frozen clothing and cover the patient with warm blankets. Prevent refreezing. Warm pack may be utilized for the neck (posterior), armpits, groin, and along the thorax. 4. Warm oxygen (hot pack around tubing) 15 L/min via non-rebreather mask or 6L/min via nasal cannula if patient unable to tolerate mask. Be prepared to support patient's respirations with BVM if necessary. 5. Do not rub frostbitten or frozen body parts. Protect from injured parts (e.g. blisters) with light, sterile dressings and avoid pressure to the area. 6. Follow cardiac arrest protocol if necessary. Check pulse for 45-60 seconds prior to start of CPR. 	EMR
------------	--	------------

EMT	<ol style="list-style-type: none"> 1. Continue EMR care. 2. Apply cardiac monitor and obtain 12-lead EKG, if indicated by chief complaint, and transmit to receiving facility (if equipped). It is beyond the scope of the EMT to interpret 12-leads or cardiac rhythms. 3. Initiate ALS intercept for further medications, if indicated. 4. Contact receiving hospital as soon as possible (need time to prepare) or Medical Control if necessary. 5. Treat other symptoms per the appropriate protocol. 	EMT
------------	--	------------

P	I	<ol style="list-style-type: none"> 1. Continue EMT care. 2. Initiate IV 1-2L bolus of Normal Saline (Hot packs around IV tubing to warm) utilizing antecubital space. if possible & large bore needle. 	I	P
----------	----------	--	----------	----------

AHA Guidelines recommend:

- If core temperature is less than 86°F in cardiac arrest, or 30 °C then:
 - limit defibrillations to 3
 - withhold all IV medications
- If the core temperature rises above 86°F in cardiac arrest, or 30°C resume normal protocols