COLD INDUCED INJURY
ALWAYS USE STANDARD PRECAUTIONS

INDICATION
- Exposure to cold and/or wet environment

TREATMENT and CRITICAL INFORMATION
- Move patient to a warm, protected environment as soon as possible
- Remove all wet clothing and cover entire body (including head & hands) with warm blankets
- ALS RMC – obtain core temperature (epitympanic or rectal), treat hypoglycemia per ALOC policy

<table>
<thead>
<tr>
<th>TEMPERATURE</th>
<th>SYMPTOMS</th>
<th>VS</th>
<th>TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild 90-95°F /32-35C</td>
<td>shivering, apathy, ataxia LOC</td>
<td>increased HR, increased RR, NL BP</td>
<td>IV fluids (warm if available); warm blankets, hot packs to chest, back, groin, axilla</td>
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<tr>
<td>Moderate 82-90°F/28-32C</td>
<td>shivering may cease; decreasing LOC; atrial dysrhythmias (will resolve with warming)</td>
<td>may be bradycardic and hypotensive; pulse may be difficult to detect</td>
<td>as above; handle patient gently and try to keep horizontal;</td>
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<tr>
<td>Severe &lt;82°F/&lt;28C</td>
<td>minimally or completely unresponsive; ventricular dysrhythmias</td>
<td>profound hypotension; difficult to detect any VS (auscultate for heart sounds)</td>
<td>as above; critical to handle patient gently and keep horizontal; IV fluids (warm if available) @ 20ml/kg bolus; reassess after 500 ml; repeat as necessary for SBP &gt; 90</td>
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- If there are no signs of life and asystole remains after 60 seconds, ventilate for three minutes; auscultate for heart rate and assess for electrical activity for 60 seconds.
- If still asystolic and no pulse, begin CPR; if VF/VT defibrillate once @ 200 or 360J (depending on manufacturer) and if no change, begin CPR.
- If PEA (even very slow); withhold CPR; continue warming measures; begin transport, continue IV fluid boluses (as above); handle gently and manage airway.
- Withhold ACLS medications until core temperature reaches 86°F/30°C
- Hypothermia from submersion: Based on reliable report or witness, if submersion is <60 minutes, attempt resuscitation/active rewarming. If submersion is known to be >60 minutes, resuscitation should not be initiated (see Determination of Death Policy, ATG6).

SPECIAL CONSIDERATION
- Subtler presentations exist in the elderly, newborns, chronically ill, patients taking medications and alcohol
- Handle the patient gently for all procedures; physical manipulations have been reported to precipitate ventricular fibrillation.
- Continue re-warming in patients with temperature < 35°C (95°F) with known or suspected hypothermia (hypothermia from submersion <60 minutes) as the primary cause or significant contributor of death, unless obvious death or valid DNR are present.