3.06 COLD INJURY/HYPOTHERMIA
EMSAC FEBRUARY 2026

General Assessment
• Assess ABC's with special attention to mental status • Secondary survey – with focus on identifying associated skin/tissue injury (e.g. frostbite), especially to distal extremities or exposed areas which may be pale, cool and insensate • Obtain history, including time and duration of cold exposure, infectious symptoms, medical history and medications, substance use, and/or associated trauma
BLS Management
• ~~Position of comfort.~~ Remove the patient from the cold environment. • Prevent further heat loss by removing wet clothes and drying skin. • Vital signs, Oxygen PRN (goal >94%) • If concerned about altered mental status, check blood glucose level (**see protocol 2.03**)~~NPO.~~ • ~~**Oxygen** as indicated. Remove all wet clothing. Gently dry patient. Cover with blankets (warm if possible) to prevent further heat loss.~~ • Initiate active, external rewarming, including using blankets. External heat is most effective if concentrated to the chest and back. For example, apply several heat backs to front and back of patient's chest. • **Frost Bite/Skin Injury:** very susceptible to injury from pressure or heat. Do NOT rub or apply heat packs, which can burn hypothermic skin. Keep covered and avoid exposures that might cause thawing and re-freezing. • ~~Maintain warm environment.~~
ALS Management
• IV/IO of **Normal Saline** at TKO. • Treat hypoglycemia (see protocol 2.03) • Obtain 12 lead ECG, given high frequency of dysrhythmia • For hypothermic cardiac arrest, see comments

Comments

- ~~Treat cardiac dysrhythmias according to protocol.~~
- As hypothermia progresses, patients may become more confused, lethargic and comatose. Shivering can substantially increase heat production and may cease with severe hypothermia.

Hemodynamic Instability

- Severely hypothermic patients become more bradycardic and may need prolonged palpation/observation to detect pulse and respirations. Atropine and transcutaneous pacing are not recommended.
- Hypothermia can cause extreme cardiac instability. Monitor vital signs carefully and move/adjust patient only as necessary. Excessive movement may precipitate ventricular fibrillation.
- Patients in hypothermic cardiac arrest may have good neurological outcomes even with prolonged CPR. Defibrillation may not be effective until patient is re-warmed. If one (1) initial attempt at defibrillation is not successful, then further attempts should be delayed until rewarming. Acutely hypothermic patients CANNOT be pronounced dead unless re-warmed or patient is determined dead by other criteria (see Policy 4050)
- ~~Bradycardia is normal; very slow rates may be sufficient for metabolic demands.~~
- ~~Excessive movement of the patient may precipitate ventricular fibrillation. Use caution while performing advanced airway management or when moving patient.~~
- ~~Hypothermic cardiac arrest patients with return of spontaneous circulation should not be actively cooled. Keep patient covered and transport to STAR center.~~

~~Base Hospital Contact Criteria~~

- ~~Discontinuation of resuscitation efforts in hypothermic patients that do not meet criteria for pronouncement **(Policy 4050)**.~~