

	<b>Department Name</b> <b>Address</b>	<b>ALS</b>	<b>Paramedic</b>
		<b>Revision #</b>	
		<b>Implementation Date</b>	
<b>Protocol</b>	<b>2.2.27 Frostbite</b>	<b>Last Reviewed/Update Date</b>	
<b>Author / Owner</b>		<b>Medical Director</b>	

Frostbite can occur in three levels of severity:

- A. First degree: Presents itself as numbed skin that may turn white in color and waxy in appearance. The skin may feel stiff to the touch, but the tissue under is still warm and soft.
  - B. Second degree: The skin will be white or blue and will feel hard and frozen. Blistering and edema are likely. Second degree frostbite is a serious medical condition.
  - C. Third degree: The skin is white, blotchy, and/or blue. The tissue underneath is hard and cold to the touch. The tissue underneath has been damaged and blistering is inevitable.
1. Baseline care standards.
  2. Remove patient from cold environment and place patient in warm, dry place. Remove wet clothing. Dry patient and cover with dry linen to protect from further heat loss.
  3. Check core temperature.
    - If core temperature is < 35° C, refer to Hypothermia protocol.
  4. Administer O<sub>2</sub> 15L per minute via mask. Use warmed humidified O<sub>2</sub> if available.
  5. Remove jewelry, gloves, shoes, and other restrictive objects.
  6. Monitor ECG.
  7. Attend to injured areas:
    - Protect from pressure, trauma, and friction.
    - Do not rub or massage.
    - Do not allow limb to thaw if there is a chance it will refreeze.
    - Do not allow patient to ambulate once the limb has started to thaw.
    - Consider warming in warm water, make sure temp stays constant.
    - Continue until distal tip of injured extremity flushes.
    - Dry and wrap affected area with dry sterile dressings.
  8. DO NOT rapidly rewarm.

9. Use a pulse oximeter probe to detect peripheral perfusion in affected tissues.
10. Establish IV access in unaffected limb.
11. For pain control, if patient is hemodynamically stable administer:
  - *Morphine Sulfate 0.1mg/kg IV for pediatric, 0.5mg/kg for infant.* Repeat PRN. Max. dose of 10mg.
12. Transport to nearest appropriate hospital.

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*Medical Director's Signature*

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*Date*

Disclaimer:

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