Care of Cold Injuries

Emergency Room Care of Cold Injury
- Treat “core” hypothermia
  - Use local treatment protocols for rewarming
- Avoid limb rewarming unless it can be done definitively (to prevent refreezing)
- Preserve tissue
  - Rapid rewarming
  - Lytic therapy for 2–3° injury for limb salvage
- Protect affected body part from mechanical trauma
- Call The Burn Center with any questions

1-800-922-BURN (2876)
Transfer to The Burn Center at Regions Hospital within 12 hours of exposure offers the best chance of preserving tissue and digits for a severely frostbitten limb.

Frostbitten Tissue Rewarming Guidelines

Correct systemic hypothermia first, then rewarm frostbitten extremities.
- Immersion in warm water (104–108° F or 40–42° C)
- Flushing indicates perfusion (and time to STOP)
- Anticipate pain with reperfusion (narcotics)
- During rewarming keep extremity level to combat edema formation

After Rewarming

- Dressings
  - Xeroform (Vaseline gauze to blisters/open areas)
  - Avoid Silvadene (maceration)
  - Avoid constrictive wraps/footwear etc.
- Elevate affected body part
- Lamb’s wool between digits
- Avoid/limit further cold exposure (temperature restrictions)
- Medications:
  - Ibuprofen 400–600mg TID for 1 week (10mg/kg TID for kids)
  - Analgesia
  - Strictly prohibit nicotine
- Tetanus per ACS guidelines
- Prophylactic antibiotics not indicated

Degree of Injury
(Determined after rewarming)
- 1°/Superficial-hyperemia +/- edema without blisters
  - Outpatient management typical
- 2°/Partial-hyperemia and blisters
  - Hospital admission
  - No ambulation until pedal edema has resolved
  - Consider burn surgeon consult (1-800-922-BURN)
- 3°/Full Thickness-pale, mottled, or proximal hemorrhagic blisters
  - Amputations are likely
  - Thrombolytic therapy can prevent amputations
  - Goal to initiation is < 12–24h
  - Transfer to Regions Hospital Burn Center