# Initial Management of Cold Burns (Frost Bite)

**Adults and children with cold burns should be discussed with the local Burn Service**

- Telephone advice and support for care following cold burn injury is available at all times
- If in doubt, seek early advice from local Burn Service

## PREPARE
- Provide appropriate analgesia
- Check Tetanus immunisation status
- Remove any jewellery from digits/limbs
- Consider antibiotic cover if other trauma/evidence of infection is present

## ASSESS

<table>
<thead>
<tr>
<th>Cold Injury</th>
<th>Observations</th>
<th>History</th>
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<tr>
<td>Date &amp; Time</td>
<td>Core body temperature</td>
<td>Allergies</td>
</tr>
<tr>
<td>Cause</td>
<td>Skin temperature &amp; colour</td>
<td>Medications</td>
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<td>Affected areas</td>
<td>Capillary refill time</td>
<td>Past medical history</td>
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<td>Size of tissue damage</td>
<td>Presence/absence of peripheral pulses (doppler)</td>
<td>Last Meal (time)</td>
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<td>Depth</td>
<td>Baseline bloods (U&amp;E, FBC, LFT, CRP, X-Match)</td>
<td>Events/Environment related to injury</td>
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<td>First Aid/Rewarming measures</td>
<td>Other injuries</td>
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</table>

## TREAT
- Rapidly rewarmed by immersion in 37-39°C warm water for 30 – 60 minutes
- Do not rub or massage affected area to avoid further tissue damage
- Administer oral Ibuprofen 12mg/kg (max dose 2400mg/day) or Aspirin 300 mg
- Deroof all blisters to enable accurate assessment of depth of injury

## DISCUSS
- Discuss with local Burn Service:
  - Administration of anticoagulants during re-warming
  - Use of vasodilators and thrombolytic/prostacyclin therapy in severe frostbite
  - Escharotomy ± fasciotomy if clinical suspicion of compartment syndrome

## PHOTOGRAPH
- Photograph cleaned burn wounds using a digital camera
- Send images to local Burn Service via [www.trips.nhs.uk](http://www.trips.nhs.uk)

## DRESS
- Apply topical aloe vera cream or gel
- Cover with non-adherent, atraumatic dressing
- Splint and elevate affected limb to reduce oedema and promote tissue perfusion

## REFER
- Injuries that fall within the LSEBN Burn Referral Criteria should be discussed with the local Burn Service.
- LSEBN Referral and Initial Management guidelines are available via TRIPS Help & Information on [www.trips.nhs.uk](http://www.trips.nhs.uk)

[Contact Details]
- [www.trips.nhs.uk](http://www.trips.nhs.uk)
- St Andrews Burns Service
  - Broomfield Hospital (Chelmsford)
  - Adults/Children 01245 516037
- Chelsea & Westminster Hospital (London)
  - Adults 02033152500
  - Children 02033153706
- Queen Victoria Hospital (East Grinstead)
  - Adults 01342 414440
  - Children 01342 414469
- Stoke Mandeville Hospital (Aylesbury)
  - Adults and Children 01296 315040

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Developed in collaboration with Mr Andrew Lindford from the Helsinki Burn Centre

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