Please call 911 if you think you have a medical emergency.

Frostbite Treatment

Self-Care at Home

- First, call for help.
- Keep the affected part elevated in order to reduce swelling.
- Move to a warm area to prevent further heat loss.
- Note that many people with frostbite may be experiencing hypothermia. Saving their lives is more important than preserving a finger or foot.
- Remove all constrictive jewelry and clothes because they may further block blood flow.
- Give the person warm, nonalcoholic, noncaffeinated fluids to drink.
- Apply a dry, sterile bandage, place cotton between any involved fingers or toes (to prevent rubbing), and take the person to a medical facility as soon as possible.
- Never rewarm an affected area if there is any chance it may freeze again. This thaw-refreeze cycle is very harmful and leads to disastrous results.
- Also, avoid a gradual thaw either in the field or in the transport vehicle. The most effective method is to rewarm the area quickly. Therefore, keep the injured part away from sources of heat until you arrive at a treatment facility where proper rewarming can take place.
- Do not rub the frozen area with snow (or anything else, for that matter). The friction created by this technique will only cause further tissue damage.
- Above all, keep in mind that the final amount of tissue destruction is proportional to the time it remains frozen, not to the absolute temperature to which it was exposed. Therefore, rapid transport to a hospital is very important.

Medical Treatment

- After initial life threats are excluded, rewarming is the highest priority.
  - This is accomplished rapidly in a water bath heated to 40-42°C (104-107.6°F) and continued until the thaw is complete (usually 15-30 minutes).
Narcotic pain medications may be given because this process is very painful.
Because dehydration is very common, intravenous fluids may also be given.

- After rewarming, post-thaw care is undertaken in order to prevent infection and a continuing lack of oxygen to the area.
  - The clear blisters are removed while the bloody ones are left intact so as not to disturb the underlying blood vessels.
  - A tetanus booster is given if needed.
- People with frostbite are hospitalized for at least 1-2 days to determine the extent of injury and to receive further treatment.
  - Aloe vera cream is applied every 6 hours, and the area is elevated and splinted.
  - Ibuprofen is given twice per day to combat inflammation and penicillin or another appropriate antibiotic given to prevent infection.
  - For deep frostbite, daily water therapy in a 40°C (104°F) whirlpool bath will be performed in order to remove any dead tissue.
- A number of experimental therapies do exist, many of which aim to further treat the inflammation or decreased blood flow seen in frostbite. As of yet, none of these treatments has proven beneficial.

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- When to Seek Medical Care
- Exams and Tests
- Next Steps
- Prevention
- Outlook


WebMD Medical Reference from eMedicineHealth
Reviewed by Ann Edmundson, MD on May 24, 2006
Last updated: May 24, 2006
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