

Frostbite (Frostnip)

Frostbite is damage to the skin and underlying tissues caused by the cold. Rain, snow, water and wind can cause the skin to cool faster and may lead to frostbite. It occurs most often on small, exposed areas of the body such as the hands and fingers, feet and toes, and the ears, nose and cheeks. Children are affected more quickly than adults.

Signs of Frostbite

Early signs of frostbite include:

- Skin that is paler than normal, cold, firm and dry.
- Pain, tingling, burning or aching
- Swelling
- Blisters in the first 24 hours after exposure.

If the frostbite is not treated, later signs include a dark, purple-black skin color, and no feeling or pain in the affected part of the body. **If you think your child may have frostbite, he or she should be seen by a doctor as soon as possible.**



Picture 1 Re-warm frostbitten areas in warm - not hot - water.

What to Do

It is important to re-warm the area as soon as possible (Picture 1). **Do not rub or massage the injured area.** To re-warm:

1. Fill a sink or basin with warm (not hot) water – about 104° F. Test the water with your elbow if you do not have a thermometer. Do not test the water temperature with the affected hand or foot.
2. Keep the injured part in warm water for 30 minutes, or until the area turns pink.
3. Gently pat dry and keep the area warm, dry and clean.
4. **Do not break blisters. Do not re-warm if there is a chance the area may refreeze.**
5. To re-warm the face and ears, apply warm washcloths and replace as soon as they become cool.
6. Give your child warm liquids to drink.
7. Continue re-warming for 30 minutes. Watch carefully to see if your child can move the body part. If the area turns pink or if the child begins to feel tingling, you may stop the re-warming and have your child seen by a doctor as soon as possible.

Prevention

- Dress your child warmly with layers of dry clothes. The first layer of clothing should be cotton because it absorbs moisture. Clothes should be changed if they become wet.
- Children should wear leggings and waterproof boots, a hat, mittens or gloves and scarf that covers the face (Picture 2).
- Teach your child not to touch cold metal with his tongue or bare skin.
- In the future, the frostbitten area may become painful and more easily frostbitten when exposed to cold. Be sure to cover the area when your child goes out in cold weather.
- Avoid long exposure to the cold (no more than 15 or 20 minutes), especially when it's windy. Cold wind increases the risk of frostbite.



Picture 2 Dress children warmly in layers of clothing and waterproof boots.

Care at Home

- Keep the area clean. Apply cream or ointment as ordered by your doctor.
- Change dressings as instructed by your doctor or nurse. (Refer to the Helping Hand, *Dressing Change: Clean Wound*, HH-II-19.)
- Avoid exposing your child to hot or cold temperatures.
- Be sure to keep all follow-up appointments with your doctor or clinic.

When to Call the Doctor

Call your child's doctor or the clinic if you notice any of these signs of infection:

- Fever over 101° F by mouth or 101.5° F rectally.
- Redness of the area or red streaks coming from the area
- Swelling
- Thick drainage
- Blisters develop in the frostbitten area.
- Normal color feeling does not come back after one hour of warming.

If you have any questions, be sure to ask your doctor or nurse, or call _____.