

Client Health Education Resource

Wound Care for a Frostbite Injury

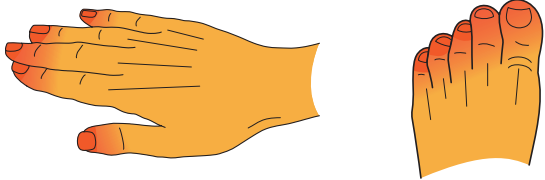
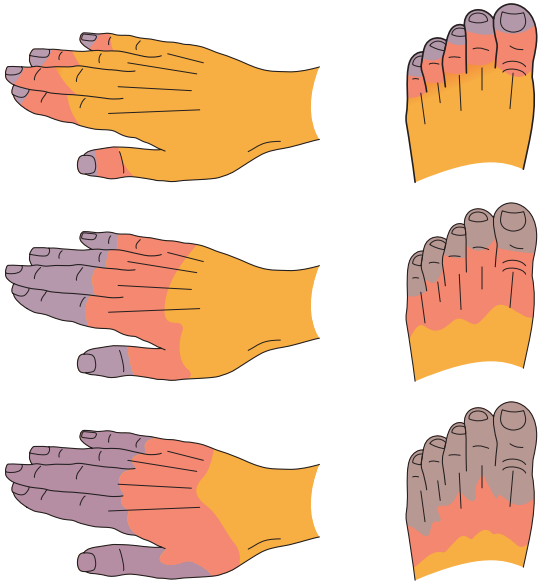
What is frostbite?

Frostbite happens when the temperature is -2°C or less and:

- You are outside without enough protection, such as, mittens, boots or shelter.
- Even with good protection, if the temperature is cold enough, or you are outside long enough.
- You are inside but do not have enough heat.

The cold temperature causes the skin to freeze. It also causes the flow of blood to the area to slow down or stop all together.

Frostbite most often occurs to fingers, toes, ears or nose but other parts of the body can also get frostbite.

<p><i>In the first stage, the skin becomes reddish purple in colour or lighter than your normal colour. There is tingling and/or numbness feeling at the area. This is a sign that you need to get in from the cold and warm up the areas.</i></p>	
<p><i>In the next stage, the areas become blue or pale in colour and feel firm when touched. The longer you are in the cold, the more blue or pale and firmer your skin becomes.</i></p> <p>There is little or no pain at this stage which is not a good sign. You need to go to an urgent care clinic or the hospital for the areas to be warmed up and treated.</p>	

The **first** thing to do is warm up the areas. The best way to do this is to soak the areas, for example, feet and/or hands, in very warm water for at least 30 minutes; this helps the blood to come back into the area.

There will be some discomfort or pain while the areas warm up but it will go away when the area gets the blood supply it needs. Pain medication can help to take away some of the pain.

Frostbite injury

If the freezing of the skin was bad enough, a wound(s) will appear over the next few days to weeks. This type of wound is called a frostbite injury.

If you had tingling in the areas and the areas were reddish-purple or pale in colour, there may be no skin damage or over the next couple of days small blisters may appear.

If you had lost feeling in the areas, they were blue or pale in colour and firm to touch, then there will be skin damage. This damage may take 3–4 days to appear and comes as blisters.

The blisters may:

- Be small or large in size.
- Be a single blister or several.
- Hold clear fluid or blood.
- Pop open, causing a wound which may take several weeks to heal.
- Dry out, leaving a dark brown covering (scab) over the area. The skin under the scab may heal.

Healing your frostbite injury(s)

A wound is a break in the skin and to heal, it needs a good flow of blood.

The cold temperature caused the flow of blood to areas of the body, such as fingers or toes, to slow down or stop. Healing a frostbite injury will depend upon whether the blood flow to the area improves over time or if it has been completely cut off.

Based upon how badly frostbitten the area(s) are, your health care team will advise you on the potential for healing for each one.

For frostbite wounds with a good blood supply:

- These wounds will need dressings which will support the body's ability to heal the wounds. It is important that you keep your wound care appointments so that the dressings can be changed and the areas checked as the wounds may get worse in the first 3–4 weeks after the injury.
- Over time, you may be able to manage your own care at home. Your community nurse will guide you in what dressing supplies you will need and how to use them.

For frostbite wounds without a good blood supply:

- These will dry out and become brown/black in colour.
- These wounds do not need dressings as they are dry. It is important to keep them dry as possible:
 - Do not soak your hands or feet in water; for example, having a tub bath or hot tub, doing dishes without rubber gloves, wearing wet socks/shoes or mittens/gloves.
 - You can have a short shower. After your shower, make sure to pat dry all the areas very well; a hair dryer on cool temperature may be helpful to dry the areas.
 - Do not use moisturizers or lotions on these dry areas.
- In some cases, the dried brown/black covering (scab) will come off and you will see a wound. Do not pick or peel off this covering, it will come off on its own. Let your community nurse know that this has happened. They will guide you as to what would be the best dressing to use to help heal the wound.
- In other cases, there is no blood supply to the damaged area and the brown/black areas over time will turn black and become shrivelled. This is called mummification. The dead area may need to be surgically amputated/cut off (your health care team will arrange for this), or the area may break off on its own; the dead piece may be disposed of in the household garbage.

Things you can do to help your body heal the frostbite injury

Do not use, or reduce the use of, tobacco or alcohol as both of these can cause the decrease in the flow of blood to injured fingers and toes. There are non-nicotine tobacco and non-alcoholic drinks available; talk with your nurse if you would like help to find out more information on these.

Do all the exercises provided by the Occupational Therapist/Physiotherapist as the exercises will help to maintain or improve the joint movement in your frostbitten hands/fingers and or feet/toes. These exercises will also help to increase blood flow to the injured areas. If you were given a splint or special shoes/boots to wear, be sure you wear them.

Eat healthy meals to support wound healing or follow a diet that a Dietitian has provided for you.

Thing you can do to care for your healed frostbitten injury

Moisturize the healed areas with a fragrance-free moisturizer containing aloe or ceramides.

Frostbitten areas can easily become frostbitten again. Protect the area(s) from the cold by wearing gloves and socks. Keep gloves, socks, shoes and boots dry.

Frostbitten areas can easily get sunburned. Protect the areas from the sun, such as by wearing a hat to cover your ears or wear socks to cover your toes if you are wearing sandals. Use a sunscreen lotion with at least a 40 SPF.



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