



## FACT SHEET

# Frostbite

Frostbite is an injury to the body that is caused by freezing. Frostbite causes a loss of feeling and color in affected areas. It most often affects the nose, ears, cheeks, chin, fingers, or toes. Frostbite can permanently damage the body, and severe cases can lead to amputation.

### Warning signs of frostbite

- **Do not ignore shivering.**  
It's an important first sign that the body is losing heat. Persistent shivering is a signal to return indoors.
- Numbness
- White or grayish-yellow colored skin
- Firm or waxy skin
- People with frostbite are often unaware until someone else points it out because the frozen tissues are numb.
- At the first signs of redness or pain in any skin area, get out of the cold or protect any exposed skin — frostbite may be beginning.

### Frostbite and hypothermia

- Frostbite and hypothermia both result from exposure to cold. If you suspect someone has frostbite, also check them for signs of hypothermia.
- Symptoms of hypothermia may include shivering, exhaustion, confusion, fumbling hands, memory loss and slurred speech.
- Hypothermia is a more serious medical condition and requires emergency medical care.

### Treatment for frostbite

If you detect symptoms of frostbite, seek medical care. If you cannot get immediate care and there are no signs of hypothermia:

- Get to a warm place as soon as possible.
- Unless absolutely necessary, do not walk on frostbitten feet or toes as this increases the damage.
- Immerse the affected area in warm — not hot — water (the temperature should be comfortable to the touch for the unaffected parts of the body).
- Or, warm the affected area using body heat. For example, the heat of an armpit can be used to warm frostbitten fingers.
- Avoid rubbing snow on frost bitten areas, and do not massage them. This can cause more damage.
- Avoid the use of heating pads, lamps and stoves, as well as fireplaces and radiators for warming. Affected areas are numb and can be easily burned.

Note: These measures don't replace proper medical care. Frostbite should be evaluated by a health care provider. A first aid course can help you prepare for cold-weather health problems. Knowing what to do is an important part of protecting your health and the health of others.

**See the back side of this fact sheet for more cold weather tips!**

## How to stay warm in cold weather

- While outside adults and children should wear:
  - A hat
  - A scarf or knit mask to cover face and mouth
  - Sleeves that are snug at the wrist
  - Mittens (they are warmer than gloves)
  - Water-resistant coat
  - Waterproof or insulated boots or shoes
- When going outside in cold weather, wear several layers of loose clothing, including a hat. Layering provides better insulation. Layers can also be removed if you become too hot.
- Be sure the outer layer of your clothing is tightly woven, preferably wind resistant, to reduce body-heat loss caused by wind. As the speed of the wind increases, it can carry heat away from your body much more quickly. When there are high winds, serious weather-related health problems are more likely, even when temperatures are only cool.
- Wool, silk or polypropylene inner layers of clothing will hold more body heat than cotton.
- Stay dry. Wet clothing chills the body rapidly. Excess perspiration will increase heat loss, so remove extra layers of clothing whenever you feel too warm.
- Be sure to protect the ears, face, hands and feet in extremely cold weather.

- Move into warm locations periodically. Limit the amount of time outside on extremely cold days.
- Move around. Physical activity raises body temperature.
- Eat well-balanced meals to help you stay warmer. Do not drink alcoholic beverages which cause your body to lose heat more rapidly.

## What to do if you get stranded in your car in cold weather

- If you have a cell phone available, call for help.
- Tie a brightly colored cloth to the antenna as a signal to rescuers.
- Wrap your entire body, including your head, in extra clothing, blankets or newspapers. Have others in the car do the same.
- Help keep infants and small children warm using your own body heat.
- Stay awake. You will be less vulnerable to cold-related health problems.
- Run the motor (and heater) for about 10 minutes per hour, opening one window slightly to let in air. Clear the exhaust pipe and the area around it from snow to help prevent carbon monoxide poisoning.
- As you sit, keep moving your arms and legs to improve your circulation and stay warmer.
- Do not eat un-melted snow because it will lower your body temperature.



PUBLIC HEALTH DIVISION

Health Security, Preparedness and Response

Phone: 971-673-1315

Fax: 971-673-1309

OHA website: <https://public.health.oregon.gov/Preparedness/Prepare/Pages/PrepareForWinterStorms.aspx>

OHA Facebook: [www.facebook.com/OregonHealthAuthority](http://www.facebook.com/OregonHealthAuthority)

OHA Twitter: [www.twitter.com/OHAOregon](http://www.twitter.com/OHAOregon)

You can get this document in other languages, large print, braille or a format you prefer. Contact Health Security, Preparedness and Response at 971-673-1315 or email [health.security@state.or.us](mailto:health.security@state.or.us). We accept all relay calls or you can dial 711.