

# COLD WEATHER ILLNESS

## EMERGENCY PREPAREDNESS TOPIC

With low temperatures comes a responsibility to prepare and take precautions against cold weather illness.

### HOW TO STAY SAFE IN THE COLD

- Monitor yourself. Use the buddy system.
- Dress in loose layers – heat gets trapped within layers.
- Cover the head to prevent excessive heat loss from the head and neck.
- Stay dry by wearing a wicking fabric next to the body and a breathable, water repellent outer layer.
- Stay adequately hydrated.
- Avoid alcohol, caffeine and nicotine.
- Eat regular meals.

### HYPOTHERMIA

Hypothermia occurs when your body loses heat faster than it produces it. The most common causes of hypothermia are exposure to cold-weather conditions or cold water. But prolonged exposure to any environment colder than your body can lead to hypothermia if you aren't dressed appropriately or can't control the conditions.

#### Signs and symptoms for mild hypothermia:

- Shivering
- Dizziness
- Nausea
- Faster breathing
- Trouble speaking
- Slight confusion
- Lack of coordination
- Fatigue
- Increased heart rate



#### Signs and symptoms for severe hypothermia:

- Shivering, although as hypothermia worsens, shivering stops
- Clumsiness or lack of coordination
- Slurred speech or mumbling
- Lack of concern about one's condition
- Confusion and poor decision-making, such as trying to remove warm clothes
- Drowsiness or very low energy
- Slow, shallow breathing
- Progressive loss of consciousness

#### Treatment:

- Call 9-1-1 or your local emergency number if you see someone with signs of hypothermia.
- If possible take the person inside, moving them carefully and slowly. Jar-ring movements can trigger dangerous irregular heartbeats.
- Carefully remove wet clothing, and cover him or her in layers of blankets while you wait for emergency help to arrive.

# FROSTBITE

Frostbite is most common on the fingers, toes, nose, ears, cheeks and chin. Because of skin numbness, you may not realize you have frostbite until someone else points it out.

## Signs and symptoms for frostbite:

- At first, cold skin and a prickling feeling
- Numbness
- Red, white, bluish-white or grayish-yellow skin
- Hard or waxy-looking skin
- Clumsiness due to joint and muscle stiffness
- Blistering after rewarming, in severe cases

## Frostbite occurs in several stages:

- **Frostnip** is the first stage. Your skin pales or turns red and feels very cold. Continued exposure leads to prickling and numbness in the affected area. As your skin warms, you may feel pain and tingling. Frostnip doesn't permanently damage the skin.
- **Superficial frostbite** is the second stage. This occurs as reddened skin turns white or pale. The skin may remain soft, but some ice crystals may form in the tissue. Your skin may begin to feel warm – a sign of serious skin involvement. If you treat frostbite with rewarming at this stage, the surface of your skin may appear mottled, blue or purple. And you may notice stinging, burning, and swelling. A fluid-filled blister may appear 24–36 hours after rewarming the skin.
- **Severe (deep) frostbite** is the final stage and it affects all layers of the skin, including the tissues that lie below. You may experience numbness, losing all sensation of cold, pain or discomfort in the affected area. Joints or muscles may no longer work. Large blisters form 24–48 hours after re-warming. Afterward, the area turns black and hard as the tissue dies.

## Treatment:

Seek medical attention for frostbite if you experience:

- Signs and symptoms of superficial or deep frostbite, such as white or pale skin, numbness, or blisters
- Increased pain, swelling, redness, or discharge in the area that was frostbitten
- Fever
- New, unexplained symptoms

While waiting for medical attention:

- Protect the affected area from further cold
- Don't walk on frostbitten feet
- Don't break blisters that may develop
- Reduce pain with ibuprofen

### TIPS:

DO rewarm gradually.

- Use lukewarm water, never hot.

- Place affected area against warm skin

- Wrap in warm cloth/blanket to reheat

**DON'T** rub the affected area with anything!  
(no snow, ice, cloth, hands)

**DON'T** allow the area to become re-frozen

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## MORE INFORMATION

[Mayoclinic.org](http://Mayoclinic.org) – Hypothermia

[Mayoclinic.org](http://Mayoclinic.org) – Frostbite

[Uitexas.org](http://Uitexas.org) – Cold Weather Illness

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