

Preventing Frostbite and Hypothermia

Prolonged exposure to low temperatures, wind or moisture—whether it be on a ski slope or in a stranded car—can result in cold-related illnesses such as frostbite and hypothermia. The National Safety Council offers these tips to help you spot and put a halt to these winter hazards.

How to detect and treat cold-related illnesses:

Frostbite

- Frostbite is the most common injury resulting from exposure to severe cold. Even skin that is protected can be subject to frostbite. It's the most common injury resulting from exposure to severe cold, and it usually occurs on fingers, toes, nose, ears, cheeks and chin. If caught early, it is possible to prevent permanent damage. If not, frostbite can lead to amputation.
- Superficial frostbite is characterized by white, waxy, or grayish-yellow patches on the affected areas. The skin feels cold and numb. The skin surface feels stiff but underlying tissue feels soft and pliable when depressed. Treat superficial frostbite by taking the victim inside immediately. Remove any constrictive clothing items that could impair circulation. If you notice signs of frostbite, immediately seek medical attention.
- If the condition is allowed to progress to deep frostbite, all layers of the skin are affected and the outcome likely will be more serious. The skin will become completely numb, blisters may form and eventually the skin tissue dies and turns black.

- Deep frostbite usually affects the feet or hands and is characterized by waxy, pale, solid skin. Treat deep frostbite by moving the victim indoors and immediately seek medical attention.

If you suspect frostbite:

- Get indoors immediately
- Seek medical attention
- Remove constrictive clothing and jewelry that could impair circulation
- Place dry, sterile gauze between toes and fingers to absorb moisture and keep them from sticking together
- Elevate the affected area to reduce pain and swelling
- For superficial frostbite, you may also place the affected area in water that is 100 to 105 degrees until the tissue softens. If you do not have a thermometer, test the water first to see if it is warm, not hot. Re-warming usually takes 20 to 40 minutes or until tissues soften.

Hypothermia

- Hypothermia occurs when the body's temperature drops below 95 degrees Fahrenheit. Symptoms of this condition include change in mental status, uncontrollable shivering, cool abdomen and a low core body temperature.
- Severe hypothermia may produce rigid muscles, dark and puffy skin, irregular heart and respiratory rates, confusion, shallow breathing, slurred speech, loss of coordination, unconsciousness, and even death.

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• In one of the most bizarre symptoms of hypothermia, "paradoxical undressing," a person actually undresses instead of bundling up. Researchers believe that in the final throes of hypothermia, a person may feel like he or she is overheating due to a rush of warm blood to the extremities.

So what should you do if you encounter someone suffering from hypothermia?

- Protect from further heat loss - move the victim inside
- Remove any wet clothing and replace with dry clothing
- Get the victim out of the cold
- Call for medical attention
- Add insulation such as blankets, pillows, towels or newspapers beneath and around the victim
- Cover the victim's head
- Handle the victim gently because rough handling can cause cardiac arrest
- Keep the victim in a horizontal (flat) position
- If necessary, give CPR

How to prevent cold-related illnesses:

Avoid frostbite and hypothermia when you are exposed to cold temperatures by:

- Wearing several layers of loose clothing

- Eating a well-balanced diet
- Drinking warm, non-alcoholic, caffeine-free liquids to maintain fluid levels
- Avoid becoming wet, as wet clothing loses 90 percent of its insulating value
- Wear mittens rather than gloves
- Cover your ears with a warm hat
- Wear socks that will keep your feet warm and dry

None of these steps are a substitute for proper medical care. Be sure to seek medical attention for frostbite and hypothermia as soon as possible.

If You Go To Extremes

Winter is fun. So go make those snow angels and tackle that double black diamond. Just make sure to limit exposure and bundle up.

If you're considering taking the Polar Plunge, make sure to consult a doctor first to determine if you have any underlying health problems. The enormous shock of these types of activities puts a strain on the heart, doctors say. Keep in mind:

- Cold shock will have you gasping for air
- Blood flow will divert to your organs
- You may become paralyzed or weak
- Blood pressure increases due to constricted blood vessels, causing greater risk of stroke

Source: National Safety Council

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