

Beware: Frostbite and Hypothermia

The following potentially lifesaving information is courtesy of the U.S. National Weather Service.

About frostbite

Frostbite results from the body's survival mechanisms kicking in during extremely cold weather. The body's first imperative is to protect the vital inner organs, which it does by cutting back on circulation to your extremities: feet, hands, nose, etc. If these parts are exposed to the cold and receive less warming blood flow, they eventually freeze.

One way to avoid frostbite is to avoid going outside during severe cold, especially if the wind chill is -50 degrees F or below. If you must go, be sure to protect the exposed parts of your body, such as ears, nose, toes, and fingers. Mittens are more effective than gloves for warming your hands. Keep your skin dry. Stay out of the wind when possible. Drink plenty of fluids since hydration increases the blood's volume, which helps prevent frostbite. Avoid caffeinated beverages, however, as they constrict blood vessels and prevent warming of your extremities. Alcohol should be avoided since it reduces shivering, which is one of your body's ways of keeping warm. And be especially wary of smoking cigarettes in extremely cold temperatures. According to one physician, when you smoke, the blood flow to your hands practically shuts off. Different Degrees of Frostbite:

- First degree: ice crystals forming on your skin
- Second degree: your skin begins to feel warm, even though it is not yet defrosted.
- Third degree: your skin turns red, pale, or white.
- Fourth degree: pain lasts for more than a few hours, and you may see dark blue or black areas under the skin. See a doctor immediately if these symptoms arise. Gangrene is a real threat.

Frostbite First Aid

Have you heard that you should rub frostbitten skin with snow? That old-time remedy can cause permanent damage.

Never rub or massage, but do use your armpits, a warm companion, warm drinks, and warm clothes to thaw your frozen body parts. Remove rings, watches, and anything that is tight. Your goal is to get indoors as quickly as possible, without walking on a frostbitten foot if you can avoid it.

Once indoors, get in a warm (not hot) bath and wrap your face and ears in a moist, warm (not hot) towel. Don't get near a hot stove or heater, and don't use a heating pad, a hot water bottle, or a hair dryer. You may burn yourself before your feeling returns.

Your frostbitten skin will become red and swollen, and you'll feel like it's on fire. You may develop blisters. Don't break the blisters. It could cause scarring.

If your skin is blue or gray, very swollen, blistered, or feels hard and numb even under the surface, go to a hospital immediately.

Sources:

The Handy Weather Answer Book, Visible Ink, Detroit, 1997

The American Medical Association Encyclopedia of Medicine, Random House, New York, 1989

U.S. Pharmacist (21,1:31)

Hypothermia: the cold-blooded killer

You may have never heard of hypothermia, much less know how to get a handle on it. Here are the bone-chilling facts about this cold-blooded killer.

A body temperature below 96 degrees Fahrenheit is called hypothermia, and it doesn't take arctic temperatures to put you at risk. Even a moderately chilly air temperature of 60 degrees is low enough to trigger hypothermia if you aren't properly clothed.

The National Institute of Aging estimates that of the 28,000 people hypothermia kills every year, the largest percentage are older people. Some medicines, problems with circulation, and certain illnesses appear to reduce the older person's ability to resist hypothermia.

Also, the older you get, the less sensitive you are to cold weather. So, your body temperature could drop to a dangerously low level without you really being aware of it. In addition, older people don't seem to shiver very effectively, which is one of the ways the body warms itself up.

Remember these tips to help prevent hypothermia (some are especially for elders or those with existing medical problems):

- Dress in layers
- Always wrap up well when going outside in the cold.
- Set your thermostat to at least a toasty 70 degrees during cold weather.
- Avoid extensive exposure to breezes and drafts.
- Keep plenty of nutritious food and warm clothes and blankets on hand to help ward off the winter chill. You'd also be wise to wear a warm hat during these months.
- Eat hot foods and drink warm drinks several times during the day.
- Ask a family member or neighbor to check on you often.
- Ask your doctor if any medicine you're taking increases your risk of hypothermia. Some drugs make it difficult for your body to stay warm. Drugs that may cause a problem include barbiturates, benzodiazepines, chlorpromazine, reserpine, and tricyclic antidepressants.

If your temperature is 96 degrees or less or you feel sluggish or recognize that you're having trouble thinking clearly, see your doctor immediately or go to the nearest emergency room. It's better to be overly cautious than to die of a disorder that doesn't have to be deadly.

To help someone you suspect may be suffering from hypothermia, first call an ambulance. Then lie close to the person and cover both of you with thick blankets. The hotter you get, the more warmth you can give the other person. Don't rub the person or handle him or her roughly. That can make things worse.

Sources:

Accidental hypothermia: a winter hazard for older people, National Institute on Aging, 1995 Geriatrics(51,2:23)
The American Medical Association Encyclopedia of Medicine, Random House, New York, 1989