Cold Weather Safety

Preparation is the best way to protect your family from the dangers of extreme cold this winter. Exposure to low temperatures can lead to hypothermia and frostbite.

What is the best clothing for cold weather?

- Hat
- 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 and shoes
- Several layers of loose-fitting clothing

Be sure the outer layer of your clothing is tightly woven, preferably wind resistant, to reduce body-heat loss caused by wind. 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. Also, avoid getting gasoline or alcohol on your skin while de-icing and fueling your car or using a snow blower. These materials in contact with the skin greatly increase heat loss from the body.

Do not ignore shivering. It's an important first sign that the body is losing heat. Persistent shivering is a signal to return indoors.

What should I do if I get stranded in my car in cold weather?

- Tie a brightly colored cloth to the antenna as a signal to rescuers.
- Move anything you need from the trunk into the passenger area.
- Wrap your entire body, including your head, in extra clothing, blankets, or newspapers.
- 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. Make sure that snow is not blocking the exhaust pipe—this will reduce the risk of carbon monoxide poisoning.

- As you sit, keep moving your arms and legs to improve your circulation and stay warmer.
- Do not eat unmelted snow because it will lower your body temperature.

Prepare your car with emergency supplies, including:

- Cell phone; portable charger and extra batteries
- Shovel
- Windshield scraper
- Battery-powered radio (and extra batteries)
- Flashlight (and extra batteries)
- Water
- Snack food
- Extra hats, coats, mittens
- Blankets
- Chains or rope
- Tire chains
- Canned compressed air with sealant (emergency tire repair)
- Road salt and sand
- Booster cables
- Emergency flares
- Bright colored flag; help signs
- First aid kit
- Tool kit
- Road maps
- Compass
- Waterproof matches and a can (to melt snow for water)

- Paper towels

Why are infants and older people most at risk for cold-related illness?

Infants lose body heat more easily than adults; additionally, infants can't make enough body heat by shivering. Infants less than one year old should never sleep in a cold room. Provide warm clothing and a blanket for infants and try to maintain a warm indoor temperature. If the temperature cannot be maintained, make temporary arrangements to stay elsewhere. In an emergency, you can keep an infant warm using your own body heat. If you must sleep, take precautions to prevent rolling on the baby. Pillows and other soft bedding can also present a risk of smothering; remove them from the area near the baby.
Older adults often make less body heat because of a slower metabolism and less physical activity. If you are more than 65 years of age, check the temperature in your home often during severely cold weather. Also, check on elderly friends and neighbors frequently to ensure that their homes are adequately heated.

What is hypothermia?

When exposed to cold temperatures, your body begins to lose heat faster than it can be produced. The result is hypothermia, or abnormally low body temperature. Body temperature that is too low affects the brain, making the victim unable to think clearly or move well. This makes hypothermia particularly dangerous because a person may not know it is happening and won't be able to do anything about it.
Hypothermia occurs most commonly at very cold environmental temperatures, but can occur even at cool temperatures (above 40°F) if a person becomes chilled from rain, sweat, or submersion in cold water.

What is 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.

What are the warning signs of frostbite?

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. Any of the following signs may indicate frostbite:

- a white or grayish-yellow skin area

- skin that feels unusually firm or waxy
- numbness

Note: A victim is often unaware of frostbite until someone else points it out because the frozen tissues are numb.

What should I do if I see someone with warning signs of hypothermia or frostbite?

If you notice signs of hypothermia, take the person's temperature. If it is below 95°, the situation is an emergency—get medical attention immediately. If you detect symptoms of frostbite, seek medical care.

Home Heating Safety: Preventing Fire and Carbon Monoxide Poisoning

Take precautions to prevent carbon monoxide and house fires when heating your home this winter. Carbon monoxide is an odorless, colorless, tasteless and highly poisonous gas that interferes with the delivery of oxygen in the blood to the rest of the body. It is produced by the incomplete burning of fuels including coal, wood, charcoal, natural gas, gasoline, diesel, kerosene and heating oil.

Carbon Monoxide Poisoning

You can prevent carbon monoxide exposure by following these safety tips:

- Have your heating system, water heater and any other gas, oil or coal burning appliances serviced by a qualified technician every year.
- Install a battery-operated carbon monoxide detector in your home and test it at least once a month, and replace carbon monoxide alarms according to the manufacturer’s instructions. The National Fire Protection Association recommends that a carbon monoxide alarm should be centrally located outside of each separate sleeping area in the immediate vicinity of the bedrooms. For added protection, install additional alarms in each separate bedroom and on every level of your home.
- Leave your home immediately and call 911 if the alarm sounds.
- Seek prompt medical attention if you suspect carbon monoxide poisoning and are feeling dizzy, light-headed or nauseous.

- Don't use a generator, charcoal grill, camp stove or other gasoline or charcoal-burning device inside your home, basement or garage or outside near a window.
- Don't run a car or truck inside a garage attached to your house, even if you leave the door open.
- Don’t burn anything in a stove or fireplace that isn’t vented.
- Don’t heat your house with a gas oven.

Preventing Fires

If you plan to use a wood stove, fireplace or space heater, be extremely careful. Follow the manufacturer's instructions and remember these safety tips:

- Store a multipurpose, dry chemical fire extinguisher near the area to be heated.
- Do not burn paper in a fireplace.
- Ensure adequate ventilation by opening an interior door or slightly opening a window if you must use a kerosene heater.
- Use only the type of fuel your heater is designed to use—don't substitute.
- If your heater has a damaged electrical cord or produces sparks, don't use it.
- Use fireplaces, wood stoves, and other combustion heaters only if they are properly vented to the outside and do not leak flue gas into the indoor air space. Make sure chimneys and flues are cleaned periodically.
- Do not place a space heater near things that may catch on fire, such as drapes, furniture, or bedding.

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