

Winter Storm Information

Winter storms are considered deceptive killers because most deaths are indirectly related to the storm: People die in traffic accidents on icy roads, people die of heart attacks while shoveling snow, people die of hypothermia from prolonged exposure to cold.



WHAT MAKES A WINTER STORM?

Cold Air: Below freezing temperatures in the clouds and near the ground are necessary to make snow and/or ice.

Lift: Something to raise the moist air to form the clouds and cause precipitation. An example of lift is warm air colliding with cold air and being forced to rise over the cold dome. The boundary between the warm and cold air masses is called a front. Another example of lift is air flowing up a mountain side.

Moisture: To form clouds and precipitation. Air blowing across a body of water, such as a large lake or the ocean, is an excellent source of moisture.

WIND CHILL

A person out of doors loses much more body heat in a windy environment than in a calm atmosphere. As the wind speed increases, so does the loss of body heat. The National Weather Service has developed a useful tool to help determine the threat presented to people out of doors by the combination and interaction of wind and temperature during cold weather: the Wind Chill Chart. A Wind Chill Chart determines an apparent temperature, i.e., how cold it feels to a person exposed to a given combination of wind speed and temperature. The body's reaction to this apparent temperature is essentially the same as it would react to an equivalent measured temperature.

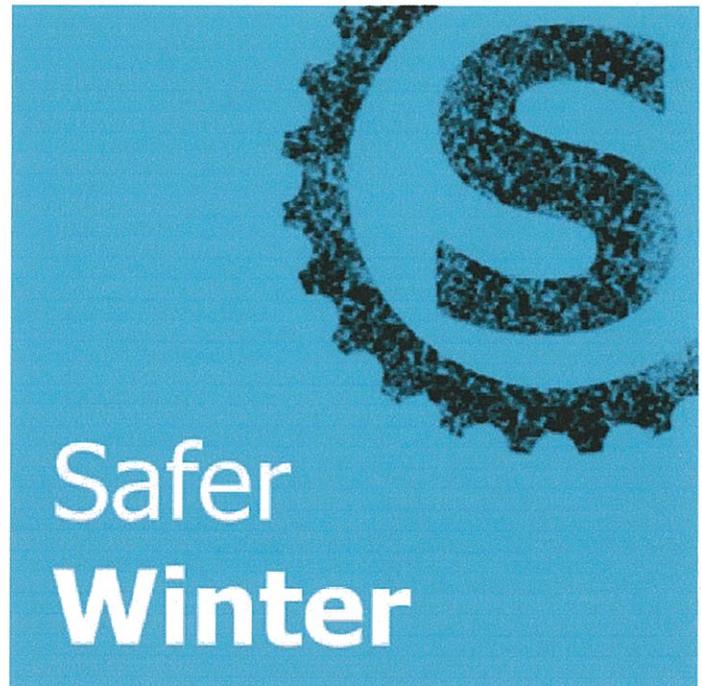
WHEN CAUGHT OUT IN A WINTER STORM

Outside: Find shelter, try to stay dry, cover all exposed parts of the body.

No shelter: Prepare a lean-to, wind-break, or snow cave for protection from the wind. Build a fire for heat and to attract attention. Place rocks around the fire to absorb and reflect heat. Do not eat snow. It will lower your body temperature. Melt it first.

In a Car or Truck: Stay in your car or truck. Disorientation occurs quickly in wind-driven snow and cold. Run the motor about ten minutes each hour for heat, open the window (on the lee side of the vehicle) a little for fresh air to avoid carbon monoxide poisoning; make sure the exhaust pipe is not blocked. Make yourself visible to rescuers: Turn on the dome light at night when running engine, tie a colored cloth (preferably red) to your antenna or door, after snow stops falling raise the hood indicating trouble. Exercise from time to time by vigorously moving arms, legs, fingers, and toes to keep blood circulating and to keep warm.

At Home or in a Building: Stay inside. When using alternative heat from a fireplace, wood stove, space heater, etc., use fire safeguards



21°C/70°F	Comfortable Temperature
16°C-18°C 61°F-64°F	Risk of Respiratory Disease, Bronchitis, Pneumonia
Below 12°C-54°F	Risk of Cardiovascular illness - Strokes - Heart attacks
Below 9°C-48°F	Risk of Hypothermia

and properly ventilate. If no heat is available: close off unneeded rooms, stuff towels or rags in cracks under doors, cover windows at night. Eat and drink. Food provides the body with energy for producing its own heat. Keep the body replenished with fluids to prevent dehydration. Wear layers of loose-fitting, light-weight, warm clothing. Remove layers to avoid overheating, perspiration, and subsequent chill.

BE PREPARED BEFORE THE STORM STRIKES

At home and at work the primary concerns are the potential loss of heat, power, telephone service, and a shortage of supplies if storm conditions continue for more than a day. Have available: flashlight and extra batteries, portable radio, extra food and water, extra medicine and baby items, first-aid supplies, heating fuel, emergency heating source, fire extinguisher, and working smoke detectors.

On the farm: Move animals to sheltered areas, haul extra feed to nearby feeding areas, have a water supply available.

In cars and trucks: Plan your travel and check the latest weather reports to avoid the storm. Fully check and winterize your vehicle before the winter season begins. Carry a winter storm survival kit that contains blankets/sleeping bags; flashlight with extra batteries; first-aid kit; knife; high-calorie, non-perishable food; extra clothing to keep dry; a large empty can and plastic cover with tissues and paper towels for sanitary purposes; a smaller can and water-proof matches to melt snow for drinking water; sack of sand (or cat litter); shovel; windshield scraper and brush; tow rope; booster cables; water container; compass; and road maps. Keep your gas tank near full to avoid ice in the tank and fuel lines. Try not to travel alone. Let someone know your timetable and primary and alternate routes.

The screenshot shows a presentation slide titled "Health effects of winter" within an Adobe Flash Player 9 window. The slide content is as follows:

Health effects of winter

Frostbite is freezing of the skin. The extremities are the body areas usually affected because of reduced blood flow and exposure.

Frostbite

- Freezing of deep layers of skin.
- Pale, waxy-white skin colour.
- Skin becomes hard and numb.

Usually affects:

- Fingers and hands.
- Toes and feet.
- Ears and nose.

Frostbite - First aid

- Move victim to warm dry area.
- Remove wet or tight clothing.
- Do not rub affected areas.
- Gently place affected area in warm water.
- Seek medical attention.

A blue snowflake icon is positioned between the "Usually affects:" and "Frostbite - First aid" sections.

Dress to fit the season: Wear loose-fitting, light-weight, warm clothing in several layers. Trapped air insulates. Layers can be removed to avoid perspiration and subsequent chill. Outer garments should be tightly woven, water repellent, and hooded. Wear a hat. Half your body heat loss can be from the head. Cover your mouth to protect your lungs from extreme cold. Mittens, snug at the wrist, are better than gloves. Try to stay dry.