

Winter storms



A preparedness guide
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Winter storms, the deceptive killers

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.

This preparedness guide explains the dangers of winter weather and suggests life-saving action you can take. With this information, you can recognize winter weather threats, develop an action plan, and be ready when severe winter weather threatens.

What to pay attention to

Winter storm watch

Severe winter conditions, such as heavy snow and/or ice, are possible within the next day or two. Prepare now!

Winter storm warning

Severe winter conditions have begun or are about to begin in your area. Stay indoors!

Blizzard warning

Snow and strong winds will combine to produce a blinding snow (near-zero visibility), deep drifts, and life-threatening wind chill. Seek refuge immediately!

Winter weather advisory

Winter weather conditions are expected to cause significant inconveniences and may be hazardous. If caution is exercised, these situations should not become life-threatening. The greatest hazard is often to motorists.

Frost/freeze warning

Below-freezing temperatures are expected and may cause significant damage to plants, crops, or fruit trees.

KEEP AHEAD OF THE STORM by listening to National Oceanic and Atmospheric Administration (NOAA) Weather Radio, commercial radio, and television for the latest winter storm watches, warnings, and advisories.

Cold facts

Frostbite

Frostbite is damage to body tissue caused by freezing. Frostbite causes a loss of feeling and a white or pale appearance in extremities, such as fingers, toes, ear lobes, or the tip of the nose. If symptoms are detected, get medical help immediately! If you must wait for help, slowly rewarm affected areas. However, if the person also is showing signs of hypothermia, warm the body core before the extremities.

Hypothermia

Hypothermia is a condition that is brought on when the body temperature drops to less than 95°F. It can kill. Those who survive, are likely to have lasting kidney, liver, and pancreas problems. Warning signs include uncontrollable shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness, and apparent exhaustion. Take the person's temperature. If it is below 95°F, seek medical care immediately!

If medical care is not available:

Begin warming the person slowly. Warm the body core first. If needed, use your own body heat to help.

Get the person into dry clothing and wrap him or her in a warm blanket covering the head and neck.

Do **NOT** give the person alcohol, drugs, coffee, or any hot beverage or food; warm broth is better.

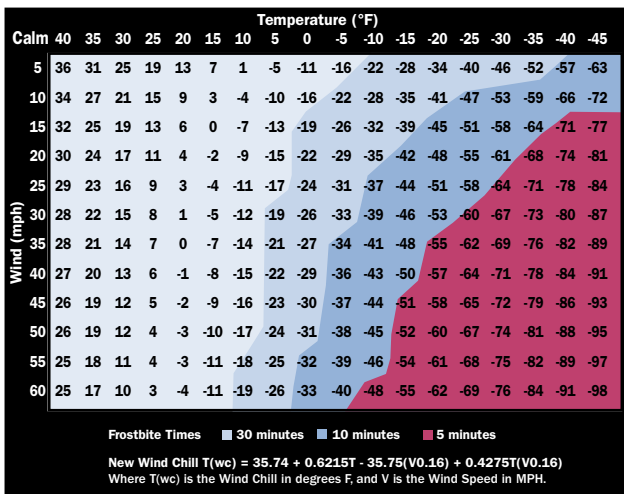
Do **NOT** warm extremities (arms and legs) first! This drives the cold blood toward the heart and can lead to heart failure.

Wind chill

Wind chill is based on the rate of heat loss from exposed skin caused by combined effects of wind and cold. As the wind increases, heat is carried away from the body at an accelerated rate, driving down the body temperature. Animals also are affected by wind chill.

Read right and down from the calm air line to know how long you have before frostbite may occur. For example, a temperature of zero degrees Fahrenheit (0°F) combined with a wind of 20 miles per hour has an equivalent cooling effect of -22°F and may cause frostbite in 30 minutes.

Wind chill chart



Be prepared before the storm strikes

At home and at work

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.
- Battery-powered NOAA Weather Radio and portable radio to receive emergency information. These may be your only links to the outside.
- Extra food and water. High energy food, such as dried fruit or candy, and food requiring no cooking or refrigeration.
- Extra medicine and baby items.
- First-aid supplies.
- Heating fuel. Fuel carriers may not reach you for days after a severe winter storm.
- Emergency heating source, such as a fireplace, wood stove, space heater, etc. *Learn to use properly to prevent a fire and have proper ventilation.*
- Fire extinguisher and smoke detector. *Test units regularly to ensure that they work.*

On the farm/pets

Move animals to sheltered areas. Shelter belts, properly laid out and oriented, are better protection for cattle than confining shelters, such as sheds.

Haul extra feed to nearby feeding areas.

Have a water supply available. Most animal deaths in winter storms are from dehydration.

In vehicles

Plan your travel and check the latest weather reports to avoid the storm!

Have your vehicle fully checked and winterized before the winter season begins.

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.

Carry a winter storm survival kit:

- blankets/sleeping bags
- flashlight with extra batteries
- first-aid kit
- knife
- high calorie, nonperishable food
- extra dry clothing
- a large empty can and plastic cover with tissues and paper towels for sanitary purposes
- a smaller can and waterproof matches to melt snow for drinking water
- sack of sand (or cat litter)
- shovel
- windshield scraper and brush
- tool kit
- tow rope and booster cables
- water container
- compass and road maps

Family disaster plan

Follow these basic steps to develop a family disaster plan

Gather information about hazards. Contact your local National Weather Service office, emergency management office or civil defense office, and American Red Cross chapter. Find out what type of disasters could occur and how you should respond. Learn your community's warning signals and evacuation plans.

Ask yourself: Where will my family be when disaster strikes? They could be anywhere—at work, at school, or in the car. How will you find each other? Will you know if your children are safe? Disasters may force you to evacuate your neighborhood or confine you to your home. What would you do if basic services, such as water, gas, electricity, or telephones, were cut off?

Meet with your family to create a plan. Discuss the information you have gathered. Pick two places to meet: a spot right outside your home for an emergency, such as fire, and a place away from your neighborhood in case you can't return home. Choose an out-of-state friend as your "family check-in contact" for everyone to call if the family gets separated. Discuss what you would do if advised to evacuate.

Implement your plan. (1) Post emergency telephone numbers by phones; (2) install safety features in your house, such as smoke detectors and fire extinguishers; (3) inspect your home for potential hazards (such as items that can move, fall, break, or catch fire) and correct them; (4) have your family learn basic safety measures, such as CPR and first aid, how to use a fire extinguisher, and how and when to turn off water, gas, and electricity in your home; (5) teach children how and when to call 911 or your local Emergency Medical Services number; (6) keep enough supplies in your home to meet your needs for at least three days; (7) assemble a disaster supplies kit with items you may need in case of an evacuation. Store these supplies in sturdy, easy-to-carry containers, such as backpacks or duffle bags; (8) keep important family documents in a waterproof container; (9) keep a smaller disaster supplies kit in the trunk of your car.

Practice and maintain your plan. Ask questions to make sure your family remembers meeting places, phone numbers, and safety rules. Conduct drills. Test your smoke detectors monthly and change the batteries at least once a year. Test and recharge your fire extinguisher(s) according to manufacturer's instructions. Replace stored water and food every six months.

When caught in a winter storm

General rules

Avoid overexertion, such as shoveling heavy snow, pushing a car, or walking in deep snow. The strain from the cold and the hard labor may cause a heart attack. Sweating could lead to a chill and hypothermia.

Do not eat snow. It will lower your body temperature. Melt it first.

Exercise from time to time by vigorously moving arms, legs, fingers, and toes to keep blood circulating and to keep warm.

Outside

Find shelter

- Try to stay dry.
- Cover all exposed parts of the body.

If 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.

At home or in a building

Stay inside.

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, lightweight, warm clothing. Remove layers to avoid overheating, perspiration, and subsequent chill.

When using alternative heat from a fireplace, wood stove, space heater, etc.:

- Use fire safeguards.
- Properly ventilate.

If the building has no heat:

- Close off unneeded rooms.
- Stuff towels or rags in cracks under doors.
- Cover windows at night.

In a vehicle

Stay in your vehicle. Disorientation occurs quickly in wind-driven snow and cold.

Run the motor about ten minutes each hour for heat.

- Open the window 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.
- Raise the hood indicating trouble after snow stops falling.