

SEVERE WINTER WEATHER

While the danger from winter weather varies across the country, nearly all Americans, regardless of where they live, are likely to face some type of severe winter weather at some point in their lives. Here in Iowa, we generally see a few severe winter storms every year. This could mean snow or subfreezing temperatures, as well as strong winds or even ice or heavy rainstorms. One of the primary concerns is the winter weather's ability to knock out heat, power and communications services to your home or office, sometimes for days at a time. The National Weather Service refers to winter storms as the "Deceptive Killers" because most deaths are indirectly related to the storm. Instead, people die in traffic accidents on icy roads and of hypothermia from prolonged exposure to cold. It is important to be prepared for winter weather before it strikes.

Not only should you make sure your [Family Communications Plan](#) and your Home [Emergency Supply Kit](#) are up to date several times a year, you should also remember to check the Emergency Supply Kit in your car. If you become stranded in your vehicle during a winter storm, the Emergency Supply Kit in your car could be invaluable.

WHY TALK ABOUT WINTER WEATHER?

- ❖ Each year, dozens of Americans die due to exposure to cold. Add to that number, vehicle accidents and fatalities, fires due to dangerous use of heaters and other winter weather fatalities and you have a significant threat.
- ❖ Threats, such as hypothermia and frostbite, can lead to loss of fingers and toes or cause permanent kidney, pancreas and liver injury and even death. You must prepare properly to avoid these extreme dangers. You also need to know what to do if you see symptoms of these threats.
- ❖ A major winter storm can last for several days and be accompanied by high winds, freezing rain or sleet, heavy snowfall and cold temperatures.
- ❖ People can become trapped at home or in a car, without utilities or other assistance.
- ❖ Attempting to walk for help in a winter storm can be a deadly decision.
- ❖ The aftermath of a winter storm can have an impact on a community or region for days, weeks or even months.
- ❖ Extremely cold temperatures, heavy snow and coastal flooding can cause hazardous conditions and hidden problems.

PREPARE YOUR HOME

- ❖ Make sure your home is well insulated and that you have weather stripping around your doors and windowsills to keep the warm air inside.
- ❖ Insulate pipes with insulation or newspapers and plastic and allow faucets to drip a little during cold weather to avoid freezing.
- ❖ Learn how to shut off water valves (in case a pipe bursts).
- ❖ Keep fire extinguishers on hand, and make sure everyone in your house knows how to use them. House fires pose an additional risk as more people turn to alternate heating sources without taking the necessary safety precautions.
- ❖ Know ahead of time what you should do to help elderly or disabled friends, neighbors or employees.
- ❖ Hire a contractor to check the structural stability of the roof to sustain unusually heavy weight from the accumulation of snow - or water, if drains on flat roofs do not work.
- ❖ If you have a car, fill the gas tank in case you have to leave. In addition, check or have a mechanic check the following items on your car:
 - ◆ Antifreeze levels - ensure they are sufficient to avoid freezing.
 - ◆ Battery and ignition system - should be in top condition and battery terminals should be clean.
 - ◆ Brakes - check for wear and fluid levels.
 - ◆ Exhaust system - check for leaks and crimped pipes and repair or replace as necessary. **Carbon monoxide is deadly and usually gives no warning.**
 - ◆ Fuel and air filters - replace and keep water out of the system by using additives and maintaining a full tank of gas.
 - ◆ Heater and defroster - ensure they work properly.
 - ◆ Lights and flashing hazard lights - check for serviceability.
 - ◆ Oil - check for level and weight. Heavier oils congeal more at low temperatures and do not lubricate as well.
 - ◆ Thermostat - ensure it works properly.
 - ◆ Tires - make sure the tires have adequate tread. All-weather radials are usually adequate for most winter conditions.
 - ◆ Windshield wiper equipment - repair any problems and maintain proper washer fluid level.

FAMILIARIZE YOURSELF WITH THE TERMS THAT ARE USED TO IDENTIFY WINTER WEATHER

- ❖ **Winter Weather Advisory** means cold, ice and snow are expected.

- ❖ **Winter Storm Watch** means severe weather such as heavy snow or ice is possible in the next day or two.
- ❖ **Winter Storm Warning** means severe winter conditions have begun or will begin very soon.
- ❖ **Blizzard Warning** means heavy snow and strong winds will produce a blinding snow, near zero visibility, deep drifts and life-threatening wind chill.
- ❖ **Frost/Freeze Warning** means below freezing temperatures are expected.
- ❖ When a **Winter Storm WATCH** is issued
 - ◆ Listen to NOAA Weather Radio, local radio, and television stations, or cable television such as The Weather Channel for further updates.
 - ◆ Be alert to changing weather conditions.
 - ◆ Avoid unnecessary travel
- ❖ When a **Winter Storm WARNING** is issued
 - ◆ Stay indoors during the storm.
 - ◆ If you must go outside, several layers of lightweight clothing will keep you warmer than a single heavy coat. Gloves (or mittens) and a hat will prevent loss of body heat. Cover your mouth to protect your lungs.
 - ◆ Walk carefully on snowy, icy, walkways.
 - ◆ If the pipes freeze, remove any insulation or layers of newspapers and wrap pipes in rags. Completely open all faucets and pour hot water over the pipes, starting where they were most exposed to the cold (or where the cold was most likely to penetrate).
 - ◆ Eat regularly and drink ample fluids, but avoid caffeine and alcohol.
 - ◆ Conserve fuel, if necessary, by keeping your residence cooler than normal. Temporarily close off heat to some rooms.
 - ◆ Maintain ventilation when using kerosene heaters to avoid build-up of toxic fumes. Refuel kerosene heaters outside and keep them at least three feet from flammable objects.
 - ◆ Avoid traveling by car in a storm, but if you must...
 - Carry an Emergency Supply Kit in the trunk.
 - Keep your car's gas tank full for emergency use and to keep the fuel line from freezing.
 - Tell someone what your destination is, your route, and when you expect to arrive. If your car becomes stuck along the way, help can be sent along your predetermined route.

MORE WINTER WEATHER RELATED TERMS

- ❖ **Freezing Rain** creates a coating of ice on roads and walkways.
- ❖ **Sleet** is rain that turns to ice pellets before reaching the ground. Sleet also causes roads to freeze and become slippery.
- ❖ **Blizzard:** Winds of 35 mph or more with snow and blowing snow reducing visibility to less than ¼ mile for at least 3 hours.
- ❖ **Blowing Snow:** Wind-driven snow that reduces visibility. Blowing snow may be falling snow and/or snow on the ground picked up by the wind.
- ❖ **Snow Squalls:** Brief, intense snow showers accompanied by strong, gusty winds. Accumulation may be significant.
- ❖ **Show Showers:** Snow falling at varying intensities for brief periods of time. Some accumulation is possible.
- ❖ **Snow Flurries:** Light snow falling for short durations with little or no accumulation.
- ❖ **Wind Chill** is not the actual temperature but rather how wind and cold feel on exposed skin. As the wind increases, heat is carried away from the body at an accelerated rate, driving down the body temperature. Animals are also affected by wind chill; however, cars, plants and other objects are not.
- ❖ **Frostbite** is damage to body tissue caused by extreme cold. A wind chill of -20° Fahrenheit (F) will cause frostbite in just 30 minutes. 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 is also showing signs of hypothermia, warm the body core before the extremities.
- ❖ **Hypothermia** is a condition brought on when the body temperature drops to less than 95°F. It can kill. For those who survive, there are likely to be 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 below 95°F, seek medical care immediately!**

WHAT TO LISTEN FOR:

The National Weather Service issues outlooks, watches, warnings and advisories for all winter weather hazards. Here is what they mean and what to do. Use the information below to make an informed decision on your risk and what actions should be taken. Remember to listen to your local officials' recommendations and to NOAA Weather Radio for the latest winter storm information.

- ❖ **Outlook:** Winter storm conditions are possible in the next 2-5 days. Stay tuned to local media for updates.
- ❖ **Watch:** Winter storm conditions are possible within the next 36-48 hours. Prepare now!
- ❖ **Warning:** Life-threatening severe winter conditions have begun or will begin within 24 hours. Act now!
- ❖ **Advisory:** Winter weather conditions are expected to cause significant inconveniences and may be hazardous. If you are cautious, these situations should not be life threatening.

WHEN CAUGHT IN A WINTER STORM...

Outside

Find shelter:

- ❖ Try to stay dry.
- ❖ Cover all exposed body parts.

No shelter:

- ❖ Build a lean-to, windbreak 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.

Melt snow for drinking water:

- ❖ Eating snow will lower your body temperature.

In a Vehicle

Stay in vehicle:

- ❖ You will become quickly disoriented in wind-driven snow and cold.
- ❖ Run the motor about 10 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.

Be visible to rescuers:

- ❖ Turn on the dome light at night when running the engine.
- ❖ Tie a colored cloth, preferably red, to your antenna or door.
- ❖ After snow stops falling, raise the hood to indicate you need help.

Exercise:

- ❖ From time to time, move arms, legs, fingers and toes vigorously to keep blood circulating and to keep warm.

Inside

Stay inside:

- ❖ When using alternate heat from a fireplace, wood stove, space heater, etc., use fire safeguards and properly ventilate.

No heat:

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