

Fact Sheet

Winter Storms

NIMS Integration Center
U.S. Department of Homeland Security
500 C Street, SW
Washington, DC 20472



FEMA

Heavy snowfall and extreme cold can immobilize an entire region. Even areas that normally experience mild winters can be hit with a major snowstorm or extreme cold. Winter storms can result in flooding, storm surge, closed highways, blocked roads, downed power lines and hypothermia.

Know Your Risk and What To Do

- Contact your local emergency management office to learn about emergency plans.
- Get additional information from the Federal Emergency Management Agency (www.fema.gov), the American Red Cross (www.redcross.org) and NOAA's National Weather Service (www.nws.noaa.gov).
- Inquire about emergency plans and procedures at your child's school and at your workplace.
- Make a family disaster plan that includes out-of-town contacts and locations to reunite if you become separated. Be sure everyone knows home, work and cell phone numbers, and how to call 9-1-1.
- Assemble a 3-day disaster supplies kit with food, water, medical supplies, battery-powered radio and NOAA Weather Radio All Hazards, batteries, flashlights, and other items. If you have space, consider storing food and water supplies for up to a month, if you are concerned about situations that might require lengthy shelter. For more information about assembling a disaster supplies kit, visit www.fema.gov/areyouready/.
- Gather important documents such as birth and marriage certificates, social security cards, passports, wills, deeds, and financial and insurance records. Store them in a fire and flood safe location or safe deposit box.

Before Winter Storms and Extreme Cold

- Add the following to your disaster supplies kit: ice melt for icy walkways, sand to improve traction, snow shovels and other snow removal equipment.
- Prepare for possible isolation in your home by having sufficient heating fuel; regular sources may be cut off.
- Winterize your home to extend the life of your fuel supply by insulating walls and attics, caulking and weather-stripping doors and windows, and installing storm windows or covering windows with plastic.
- Winterize your car: Battery and ignition system should be in top condition and battery terminals clean. Check antifreeze levels, windshield wiper equipment and fluid, and replace fuel and air filters. Check for leaks and crimped pipes in the exhaust system; repair as necessary. Ensure that the heater and defroster work properly. Check brakes for wear and fluid levels. Check oil for level and weight. Consider snow tires.

During a Winter Storm

- Listen to your radio, television, or NOAA Weather Radio for weather reports and emergency information.
- Eat regularly and drink ample fluids. Caffeine and alcohol cause you to lose fluids.
- Avoid overexertion when shoveling snow. Overexertion can bring on a heart attack—a major cause of death in the winter. If you must shovel snow, stretch before going outside.
- Watch for signs of frostbite. These include loss of feeling and white or pale appearance in extremities such as fingers, toes, ear lobes, and the tip of the nose. If symptoms are detected, get medical help immediately.
- Watch for signs of hypothermia. These include uncontrollable shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness, and apparent exhaustion. If symptoms of hypothermia are detected, get the victim to a warm location, remove wet clothing, warm the center of the body first, and give warm, non-alcoholic beverages if the victim is conscious. Get medical help as soon as possible.
- Conserve fuel 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.

During a Winter Storm (Continued)

- Drive only if it is absolutely necessary. If you must drive, consider the following:
 - Travel in the day, don't travel alone, and keep others informed of your schedule and progress.
 - Stay on main roads; avoid back road shortcuts.
 - Conserve cell phone batteries for essential calls.

If a blizzard traps you in the car, keep these guidelines in mind:

- Pull off the highway. Turn on hazard lights and hang a distress flag from the radio antenna or window.
- Remain in your vehicle where rescuers are most likely to find you. Do not set out on foot unless you can see a building close by where you know you can take shelter. Be careful; distances are distorted by blowing snow. A building may seem close, but be too far to walk to in deep snow.
- Run the engine and heater about 10 minutes each hour to keep warm. When the engine is running, open an upwind window slightly for ventilation. This will protect you from possible carbon monoxide poisoning. Periodically clear snow from the exhaust pipe.
- Exercise to maintain body heat, but avoid overexertion. In extreme cold, use road maps, seat covers, and floor mats for insulation. Huddle with passengers and use your coat for a blanket.
- Take turns sleeping. One person should be awake at all times to look for rescue crews.
- Drink fluids to avoid dehydration.
- Be careful not to waste battery power. Balance electrical energy needs - lights, heat, and radio - with supply. Turn on the lights at night if you see or hear work crews or rescuers so they can see you. Leaving the ceiling light on overnight will deplete the battery unless the engine is run periodically.
- If stranded in a remote area, stomp large block letters in an open area spelling out HELP or SOS and line with rocks or tree limbs to attract the attention of rescue personnel who may be surveying the area by air.
- Leave the car and proceed on foot - if necessary - once the blizzard passes.

After a Winter Storm

- Keep listening to a local radio or television station or NOAA Weather Radio for updated information and instructions. Access to some parts of the community may be limited or roads may be blocked.
- Help people who require special assistance—infants, elderly people, those without transportation, large families who may need additional help in an emergency, people with disabilities, and the people who care for them.
- Avoid driving until conditions have improved. Roads may be blocked by snow or emergency vehicles.
- Avoid overexertion. Heart attacks from shoveling heavy snow are a leading cause of death during the winter.
- Keep up with local weather forecasts and be prepared when you go outside. Major winter storms are often followed by even colder temperatures.
- Ensure that your animals' access to food and water is unimpeded by drifted snow, ice, or other obstacles

The Recovery Process

- For immediate needs, contact the American Red Cross or other local voluntary agencies.
- If you have flood insurance, contact your insurance agent as soon as possible.
- Go online to download some helpful publications:
 - <http://www.nws.noaa.gov/om/brochures/winterstorm.pdf> (a copy of "Winter Storms...The Deceptive Killers," a preparedness guide from the National Weather Service with useful information including winter storm facts, how to detect frostbite and hypothermia, what to do in a winter storm, and how to be prepared).
 - http://www.redcross.org/static/file_cont265_lang0_127.pdf. (information on winter storms from the National Disaster Education Coalition).
- For information on helping children deal with disaster, visit www.fema.gov or get a copy of FEMA 478 **Helping Children Cope with Disaster**. To obtain other fact sheets and publications call the FEMA publications warehouse at 1-800-480-2520. You can also visit www.ready.gov.

Dangerous Winter Myth!	The Facts:
In severe cold, it is best to stay warm by wearing a very heavy coat.	Wear loose, lightweight, warm clothes in layers. Trapped air insulates. Outer garments should be tightly woven, water repellent, and hooded. Wear a hat. Cover your mouth to protect your lungs from extreme cold. Mittens, snug at the wrist, are better than gloves. Remove layers to avoid perspiration and subsequent chill.