

FACT SHEET



Federal Emergency Management Agency

WINTER STORMS

A major winter storm can be lethal. Preparing for cold weather conditions and responding to them effectively can reduce the dangers caused by winter storms.

Be familiar with winter storm warning messages.

(See *Winter Storm Watches and Warnings*)

Service snow removal equipment and have rock salt on hand to melt ice on walkways and kitty litter to generate temporary traction.

Make sure you have sufficient heating fuel; regular fuel sources may be cut off.

Winterize your home.

- Insulate walls and attic.
- Caulk and weather-strip doors and windows.
- Install storm windows or cover windows with plastic from the inside.

Have safe emergency heating equipment available.

- Fireplace with ample supply of wood
- Small, well-vented wood, coal, or camp stove with fuel
- Portable space heaters or kerosene heaters (See *Kerosene Heaters*)

Install and check smoke detectors.

Contact your local emergency management office or American Red Cross chapter for more information on winter storms.

Keep pipes from freezing.

- Wrap pipes in insulation or layers of old newspapers.
- Cover the newspapers with plastic to keep out moisture.
- Let faucets drip a little to avoid freezing.
- Know how to shut off water valves.

Have disaster supplies on hand, in case the power goes out.

- Flashlight and extra batteries
- Portable, battery-operated radio and extra batteries
- First aid kit
- One-week supply of food (include items that do not require refrigeration or cooking in case the power is shut off)
- Nonelectric can opener
- One-week supply of essential prescription medications
- Extra blankets and sleeping bags
- Fire extinguisher (A-B-C type)

Develop an emergency communication plan.

In case family members are separated from one another during a winter storm (a real possibility during the day when adults are at work and children are at school), have a plan for getting back together.

Ask an out-of-state relative or friend to serve as the "family contact." After a disaster, it's often easier to call long distance. Make sure everyone in the family knows the name, address, and phone number of the contact person.

Make sure that all family members know how to respond after a severe winter storm.

Teach children how and when to call 9-1-1, police, or fire department, and which radio station to tune to for emergency information.

Kerosene Heaters

Check with your local fire department on the legality of using kerosene heaters in your community. Use only the correct fuel for your unit and follow the manufacturer's instructions. Refuel outdoors only, and only when cool. Keep your kerosene heater at least 3 feet away from furniture and other flammable objects.

IF INDOORS

Stay indoors and dress warmly.

Conserve fuel.

Lower the thermostat to 65 degrees during the day and 55 degrees at night. Close off unused rooms.

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).

Listen to the radio or television to get the latest storm information.

IF OUTDOORS

Dress warmly.

Wear loose-fitting, layered, lightweight clothing. Layers can be removed to prevent perspiration and chill. Outer garments should be tightly woven and water repellent. Mittens are warmer than gloves because fingers generate warmth when they touch each other.

Stretch before you go out.

If you go out to shovel snow, do a few stretching exercises to warm up your body. Also, take frequent breaks.

Cover your mouth.

Protect your lungs from extremely cold air by covering your mouth when outdoors. Try not to speak unless absolutely necessary.

Avoid overexertion.

Cold weather puts an added strain on the heart. Unaccustomed exercise such as shoveling snow or pushing a car can bring on a heart attack or make other medical conditions worse. Be aware of symptoms of dehydration.

Watch for signs of frostbite and hypothermia.

Keep dry.

Change wet clothing frequently to prevent a loss of body heat. Wet clothing loses all of its insulating value and transmits heat rapidly.

Remember to help your neighbors who may require special assistance — infants, elderly people, and people with disabilities.

Mitigation

Mitigation includes any activities that prevent an emergency, reduce the chance of an emergency happening, or lessen the damaging effects of unavoidable emergencies. Investing in preventive mitigation steps now such as purchasing a flood insurance policy and installing storm windows will help reduce the impact of winter storms in the future. For more information on mitigation, contact your local emergency management office.

Wind Chill

"Wind chill" is a calculation of how cold it feels outside when the effects of temperature and wind speed are combined. A strong wind combined with a temperature of just below freezing can have the same effect as a still air temperature about 35 degrees colder.

Frostbite and Hypothermia

Frostbite is a severe reaction to cold exposure that can permanently damage its victims. A loss of feeling and a white or pale appearance in fingers, toes, or nose and ear lobes are symptoms of frostbite.

Hypothermia is a condition brought on when the body temperature drops to less than 55 degrees Fahrenheit. Symptoms of hypothermia include uncontrollable shivering, slow speech, memory lapses, frequent stumbling, drowsiness, and exhaustion.

If frostbite or hypothermia is suspected, begin warming the person slowly and seek immediate medical assistance. Warm the person's trunk first. Use your own body heat to help. Arms and legs should be warmed last because stimulation of the limbs can drive cold blood toward the heart and lead to heart failure. Put person in dry clothing and wrap their entire body in a blanket.

Never give a frostbite or hypothermia victim something with caffeine in it (like coffee or tea) or alcohol. Caffeine, a stimulant, can cause the heart to beat faster and hasten the effects the cold has on the body. Alcohol, a depressant, can slow the heart and also hasten the ill effects of cold body temperatures.

Winter Storm Watches and Warnings

A *winter storm watch* indicates that severe winter weather may affect your area. A *winter storm warning* indicates that severe winter weather conditions are definitely on the way.

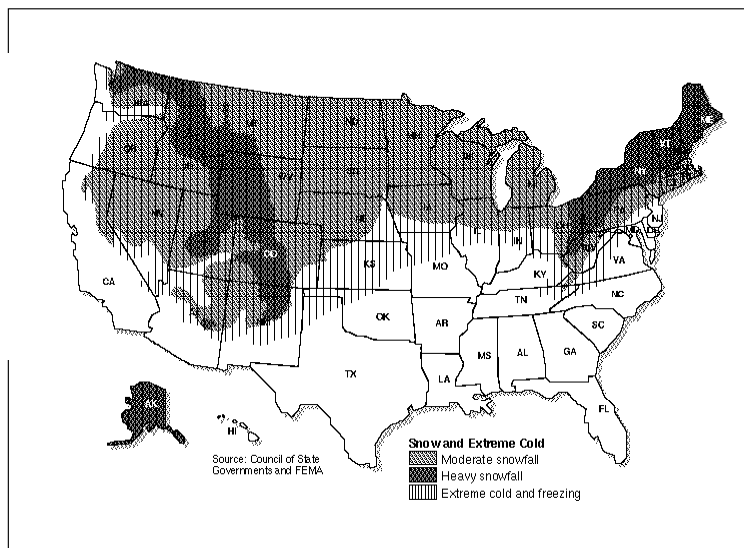
A *blizzard warning* means that large amounts of falling or blowing snow and sustained winds of at least 35 miles per hour are expected for several hours.

BACKGROUND

WINTER STORMS

EMERGENCY INFORMATION

- 1 . A major winter storm can last for several days and be accompanied by high winds, freezing rain or sleet, heavy snowfall, and extremely cold temperatures. People can become stranded on the road or trapped at home, without utilities or other services. *The best protection against severe winter weather is to stay inside and to dress warmly by wearing loose-fitting, layered, lightweight clothing.*
- 2 . A serious danger during a winter storm is *hypothermia*—a condition brought on when the body temperature drops because of prolonged exposure to extreme cold. Hypothermia is not always fatal, but for those who survive there are likely to be lasting kidney, liver, and pancreatic problems.
- 3 . Heavy snowfall and blizzards can trap motorists in their cars. Attempting to walk for help in a blizzard can be a deadly decision. Disorientation and confusion come very quickly in blowing snow. People trapped in a car during a blizzard do best to stay in the car and wait for help.



Almost the entire United States except Hawaii and the territories are at some risk from winter storms. The level of risk depends on the severity of local winter weather. Winter storms known as “northeasters” cause extensive coastal flooding, erosion, and property loss in the northeastern and middle Atlantic states.

WHAT IS A WINTER STORM?

A winter storm can range from moderate snow over a few hours to blizzard conditions with blinding wind-driven snow that last several days. Some winter storms may be large enough to affect several states while others may affect only a single community. All winter storms are accompanied by low temperatures and blowing snow, which can severely reduce visibility. A severe winter storm is one that drops 4 or more inches of snow during a 12-hour period, or 6 or more inches during a 24-hour span. An ice storm occurs when freezing rain falls from clouds and freezes immediately on impact. All winter storms make driving and walking extremely hazardous. The aftermath of a winter storm can impact a community or region for days, weeks, and even months. Storm effects such as extreme cold, flooding, and snow accumulation can cause hazardous conditions and hidden problems for people in the affected area.

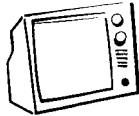
HELP YOUR COMMUNITY GET READY

The media can raise awareness about winter storms by providing important information to the community. Here are some suggestions:



1. Publish a special section in your local newspaper with emergency information about winter storms. Place special emphasis on what people should do if they are caught outside.

2. Inform your community about the different National Weather Service announcements — *winter storm watch, winter storm warning, ice storm warning, heavy snow warning, blizzard warning, severe blizzard warning, high wind warning*.



3. Conduct a series of presentations at the beginning of winter storm season. Include information on alternative heat sources and home insulation.

4. Interview local physicians about the dangers of hypothermia and other winter health conditions.

5. Produce a series of announcements on what to do if you are stuck in your car during a blizzard.

DID YOU KNOW . . .

- The leading cause of death during winter storms is from automobile or other transportation accidents. Exhaustion or heart attacks caused by overexertion are the second most likely cause of winter storm-related deaths.
- Fire during winter storms presents a great danger because water supplies may freeze and it may be difficult for fire fighting equipment to get to the fire.
- Ice storms can break power lines, causing widespread blackouts.
- Elderly people account for the largest percentage of hypothermia victims. Many older Americans literally “freeze to death” in their own homes after being exposed to dangerously cold indoor temperatures, or are asphyxiated because of improper use of fuels such as charcoal briquettes, which produce carbon monoxide.
- In March 1993, the Blizzard of '93 dumped record amounts of snow on an area that stretched from Alabama to New England. The storm left more than 170 people dead and caused hundreds of thousands of people to be without power for several days. Total damages were estimated at upward of \$800 million.

HOW THE PUBLIC CAN HELP AFTER A DISASTER

When disaster strikes, people everywhere want to help those in need. To ensure that this compassion and generosity are put to good use, the media can highlight these facts:

- ▶ Financial aid is an immediate need of disaster victims. Financial contributions should be made through a recognized voluntary organization to help ensure that contributions are put to their intended use.
- ▶ Before donating food or clothing, wait for instructions from local officials. Immediately after a disaster, relief workers usually don't have the time or facilities to setup distribution channels, and too often these items go to waste.
- ▶ Volunteers should go through a recognized voluntary agency such as the American Red Cross or Salvation Army. They know what is needed and are prepared to deal with the need. Local emergency services officials also coordinate volunteer efforts for helping in disasters.
- ▶ Organizations and community groups wishing to donate items should first contact local officials, the American Red Cross, or Salvation Army to find out what is needed and where to send it. Be prepared to deliver the items to one place, tell officials when you'll be there, and provide for transportation, driver, and unloading.