Winter Weather

Winter Storm Watch or Warning: What's the difference?



A **winter storm watch** means a severe storm with heavy snow or ice may occur within 48 hours. Watch the internet or television for updates on if and when a storm may occur. Be ready to change your plans if necessary.





A **winter storm warning** means a significant combination of hazardous winter weather is occurring or is imminent. The winter storm may cause freezing temperatures, high winds, and blowing snow. This is dangerous to life and property. If you don't have to, do not travel. Take shelter and stay warm!

What you can do before a winter storm

- Complete the FAMILY EMERGENCY PLANNING FORM with your family. Review your EVACUA-TION PLAN(S) with your family and practice what you need to do if you have to evacuate, including how to get a person with limited mobility or no mobility out of the house. If a person has a mobility device and/or a service animal, practice getting the person out both with AND without that mobility device and/or service animal.
- If your plan includes using your vehicle(s) to evacuate, make sure there is enough gas in the vehicle(s) at all times.
- Follow any directions to evacuate from emergency personnel broadcast on Television, Internet, NOAA, or local radio.
- **Don't get caught in the cold.** Stay indoors as much as possible and stay out of the cold. Every

The dangers of winter weather

Some winter storms have very strong winds. The wind chills are dangerous for people and pets.



Heavy ice (sleet), freezing rain, and heavy snow can bring down trees and poles. This can hurt people, damage homes, and other buildings. Roads may become dangerous to drive on.

year get a tune-up for your furnace. Have your chimney cleaned and inspected.

 Move pets and animals inside during cold weather. If this is not possible, make sure they have shelter and are protected from cold winds and extreme temperatures. They should also have access to water that will not freeze.

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What you can do during a winter storm

- Stay indoors. Do not travel.
- Bring pet(s)/service animal(s) or companion animals inside. Move other animals or livestock to a shelter. Protect them from cold wind, snow, and ice. Make sure they have drinking water that will not freeze.
- Stop cold air leaking into your home. Roll up towels and put them at the bottom of any doors and windows. Close the curtains or cover windows with a blanket.
- Dress in many layers to stay warm. Cover as much of your body as you can. Just one layer of clothes will not protect you well. Wear a hat, one or two pairs of woolen socks, and a sweatshirt or coat. Use scarves, towels, or many blankets.
- **Cuddle up.** Huddle with other people under the same blanket. You'll warm up faster.

If you are outside in a winter storm

- Wear several layers of clothing. They should be loose-fitting, lightweight, and warm. Just one layer of heavy clothing will not protect you well.
- Wear a hat and mittens to reduce loss of body heat.
- Cover your mouth with a scarf to protect your lungs.
- Stay dry. Change damp clothing often to avoid losing body heat.
- Take it slow and easy when shoveling snow.
 You can have a heart attack by shoveling too hard in the cold.
- Watch for signs of frostbite. For more information, see the **Frostbite** section of this manual.

 Watch for signs of hypothermia. For more information, see the Hypothermia section of this manual.

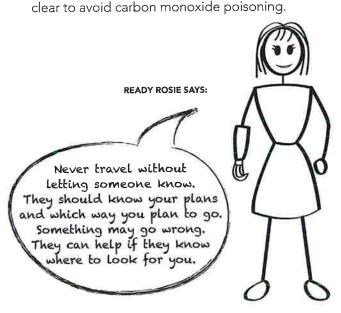
If you are driving in a winter storm

- Always keep the gas tank in your vehicle more than half full.
- Drive only if you must. If you must drive, travel during the day. Stay on main roads and avoid back road shortcuts.

If you are trapped in your car

- **Get off the highway if you can.** Turn on the blinking hazard lights. Hang a colored flag from the radio antenna or window until help arrives.
- Stay in your car where rescuers can find you.

 Do not go out and walk unless you see a building close by. Be careful! A building may seem closer than it really is, and the snow may be too deep to walk in.
- Turn on the engine and the heater for 10
 minutes each hour to keep warm.
 Crack open a window to circulate the air. Make sure
 the exhaust pipe is not covered by snow. Keep it



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- If you are with someone, take turns sleeping.

 One person should be awake at all times to watch for rescue crews.
- Save your battery power. Do not turn on the lights—with the exception of hazard lights if needed—unless you have to. Do not plug a phone or tablet into your charger unless you have to.
- Turn on the inside light at night so work crews or rescuers can see you.
- Help rescuers find you by airplane if you are
 in the country or near an open area. Spell out
 "HELP" or "SOS" with rocks or tree limbs near your
 car. Make the words big enough to be seen easily from
 an airplane.

Know the winter conditions

Blizzard: A severe snowstorm that has very cold temperatures and strong winds. This creates blowing snow that makes it hard to see. This storm is dangerous.

Thundersnow: A thunderstorm with snow instead of rain. There will be lightning and thunder too.

Sleet: Rain drops freeze into small ice pellets. These ice pellets can bounce off the ground. Sleet can pile up like snow. This will make the roads dangerous to drive on.

Freezing Rain: This happens when the ground is frozen and the air is warm.

Rain drops fall like normal rain but then freeze when they hit the ground. This causes a layer of ice on everything: roads, trees, power lines, and buildings. Layers of ice can become very heavy and cause damage.

Ice Storm: A winter storm caused by freezing rain. The ground and all other surfaces are covered by ¼ inch of ice or more.

Wind Chill: How fast the wind is blowing and how cold the wind feels. Wind chill can make us feel colder than the air temperature. Our body makes a tiny layer of warm air around our skin that helps us feel warm. When this is blown away, we feel colder. The harder the wind blows, the colder we feel.

Snow Flurries: A light snow falling for a short time. There will be almost no snow accumulation on the ground.

Snow Showers: When snow is falling lightly or heavily for short periods of time. Sometimes there will be snow on the ground.

Blowing Snow: Strong wind can cause snow to fall horizontally. Strong winds can blow snow on the ground over roads and block stairs or doors. This can make it hard to walk through or to see the roads.

Frostbite

What is frostbite?

Frostbite happens when parts of the skin and other tissues freeze. The more the tissues freeze, the more damage it causes. The most common places to get frostbite are on the face, nose, ears, fingers, and toes. This is because they are the furthest away from the heart. Frostbite can happen fast, even within a few minutes!



What you can do to prevent frostbite

- Pay attention to weather forecasts and the wind chill. Stay indoors during cold, wet, or windy weather.
 If you must go outside, cover up!
- Wear clothing that protects against wind, snow, and rain.
- Wear a hat, mittens and a scarf. Mittens give better protection than gloves. If you prefer to wear gloves, wear mittens over your gloves. This protects your fingers.
- Get out of the cold. Once you're indoors, remove wet clothes.
- Do not drink alcohol. It causes your body to lose heat faster. Stay warm by drinking warm, sweet drinks, such as hot chocolate. Eating well-balanced meals also helps you to stay warm.

Symptoms of frostbite

- · Painful, prickly, or itchy feeling
- · Red, white, pale, or gray/yellow-looking skin
- · Hard, waxy-looking skin or blisters
- Numbness
- Clumsiness because of joint and muscle stiffness

What you can do to treat frostbite

Warm the area slowly and carefully. Don't rub the skin! If hands or feet have frostbite, put them in warm (not hot!) water. Use a warm blanket. Do not use a stove, fireplace, or heating pad, because these can cause burns.

The skin will turn red when blood flow returns. There will be a feeling of burning and tingling as the area warms up. Find medical help if there is still numbness and pain or blisters.

Protect your ears and hearing aids or cochlear implant device

Our ears get cold easily. We may not notice any pain or chilling sensation until it is too late! Protect your ears from frostbite. If you have a hearing device, protect it from damage due to the cold.

- Find ear gear or winter headbands that can cover your ears and hearing device. It should fit loosely.

 This will reduce feedback in your device.
- Protect your hearing device from condensation (moisture). Moisture builds up when very cold things
 warm up. Don't let your device get too cold and then warm up quickly. The inside of your hearing
 instrument can get damp and fail.
- Carry extra batteries in a warm pocket. Hearing aid batteries will lose power quickly in colder temperatures.

Hypothermia

What is hypothermia?

Hypothermia happens when a person's body temperature falls below normal. This can be caused by anything that exposes the body to cold. Signs and symptoms usually develop slowly. A person's breathing and heart rate will slow. The person may start to feel confused and tired and may not be aware of being in danger and needing help.



What you can do to prevent hypothermia

- Dress in layers and keep your body covered. Layer light warm clothes that fit loosely.
- Don't forget to wear warm hats, scarves, and mittens.
- Avoid outdoor activities that cause you to sweat. Wet clothing in cold weather can cause you to lose body heat fast.
- **Stay as dry as possible.** Get out of damp clothing quickly. Be extra careful to keep your hands and feet dry. Mittens and boots can easily get wet by snow.

What you can do to help a person suffering from hypothermia

- Call 911. Get medical help on the way as soon as possible.
- Be gentle and do not move the person too much. Don't massage or rub the person too hard.
 This may cause a heart attack.
- Move the person out of the cold. Remove any wet clothing.
- · If you cannot move the person out of the cold,

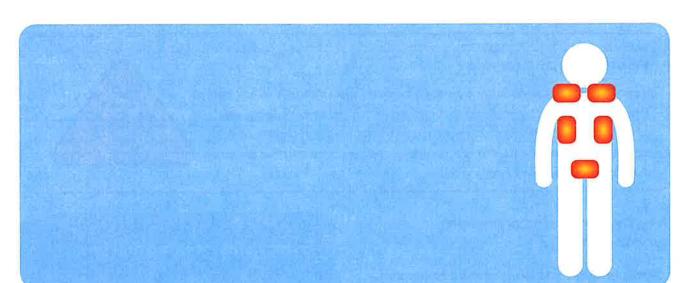
Symptoms of hypothermia

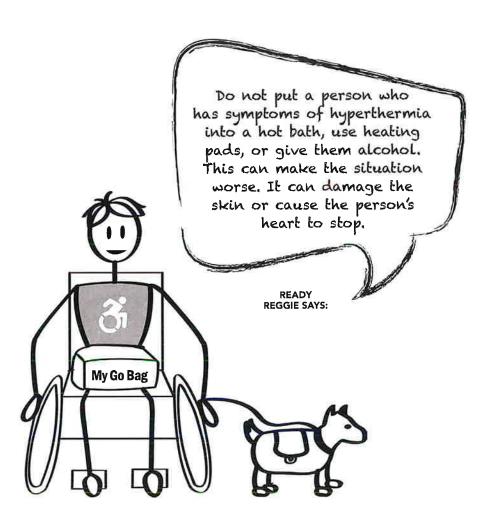
- Shivering
- Clumsiness or poor hand-eye coordination
- Sloppy communication or saying things that do not make sense
- Confusion or difficulty thinking
- Poor decision-making (such as trying to take off warm clothes)
- Drowsiness or low energy
- Low breathing or losing consciousness
- Weak pulse

protect him or her from the cold and wind. Lay the person on his or her back on a blanket or other warm surface.

- Use layers of dry blankets or coats to cover and warm the person. Cover the person's head, leaving the face exposed.
- Your own body heat can help someone with hypothermia. Gently hugging them can help warm them up.
- If the person is alert and can swallow, give him or her warm drinks and food. Avoid alcohol.
 Warm tea and chocolate are good choices.

Hypothermia







Winterizing

What is winterizing?

Winterizing includes things you can do to get your home and car ready for cold weather. The fall season is a good time to start getting ready for the winter. Check for things you will need in your home and in your car to stay warm and safe.



Winterize your home

- Move pets and animals inside during cold weather. If this is not possible, make sure they have shelter and are protected from cold winds and extreme temperatures. They should also have access to water that will not freeze.
- **Keep the cold air out.** Put up storm windows or cover windows with plastic. Wrap water pipes with insulation to keep them from freezing.
- Don't get caught in the cold. Every year get a tune-up for your furnace. Have your chimney cleaned and inspected.
- Learn how to shut off water valves. Pipes can burst if no water runs through them for a long time during winter. TURN OFF outside water sources before the first freeze!

Winterize your car

- Check your car to make sure all systems are working properly. Take your car to a mechanic if necessary.
- Always keep your gas tank full during cold weather. This keeps the fuel lines from freezing.
- Have good winter tires put on your car. Make sure they have enough tread. All-weather tires are good for most winter conditions.

Be prepared for winter on the road

Add these items to your CAR KIT to be ready for winter.

- Shovel
- Tow chain or rope
- Windshield scraper and small broom
- Road salt, sand, or kitty litter
- Disposable hand warmers
- Extra hats, socks, and mittens
- Blanket(s)
- Extra gallon of antifreeze

House Fire

What can cause a house fire?

House fires can be started by cigarettes, electrical appliances, or heaters, old or faulty wiring, gas leaks, open flames from candles or fireplaces, children playing with matches, or fire spreading from house to house.



What you can do before a house fire

- Review the EVACUATION PLANNING GUIDE
 in this manual and the HOW TO MAKE A
 HOME FIRE ESCAPE PLAN form included in
 this toolkit. If you have a physical disability or live
 in a multi-story building, see the Escape Planning
 in Tall Buildings and Evacuation Procedures/
 Evacuation Devices sections of the
 EVACUATION PLANNING GUIDE in this manual.
- PLANNING FORM with your family. Review your EVACUATION PLAN(S) with your family and practice what you need to do if you have to evacuate, including how to get a person with limited mobility or no mobility out of the house. If a person has a mobility device and/or a service animal, practice getting the person out both with AND without that mobility device and/or service animal.
- Make sure you have an EVACUATION PLAN that you have practiced.

What you can do to prevent a house fire

 Make sure your smoke alarm(s) and carbon monoxide detector are right for you. Find out what type of alerts you need, such as a flashing light or vibrating alarm. Know where they should be installed.

Calling 911 during an emergency



Plan ahead to learn how you can call 911:

- Check with your local city or county call centers to find out if they have a Text 911 service.
- Check with your video relay service (VP) provider about how to place 911 calls.
- Ask a trusted friend, neighbor or family member to dial 911 for you. They can share your location and explain what type of emergency you have.
- **Sleep with your door closed.** This will help keep the smoke and fire out for a little longer, giving you more time to escape.
- NEVER leave a room where candles are lit.
- NEVER use the range or oven to heat your home.
- Keep combustible and flammable liquids away from heat or fire. For example, cooking oils, hairspray, nail polish, and turpentine should be kept away from the stove, lit candles, sparks from a fireplace, and curling irons.



Winter Storms & Extreme Cold

Know the Terms

Freezing Rain

Rain that freezes when it hits the ground, creating a coating of ice on roads, walkways, trees, and power lines.

Sleet

Rain that turns to ice pellets before reaching the ground. Sleet also causes moisture on roads to freeze and become slippery.

Winter Storm Watch

A winter storm is possible in your area. Tune in to NOAA Weather Radio All-Hazards, commercial radio, or television for more information.

Winter Storm Warning

A winter storm is occurring or will soon occur in your area.

Blizzard Warning

Sustained winds or frequent gusts to 35 miles per hour or greater and considerable amounts of falling or blowing snow (reducing visibility to less than a quarter mile) are expected to prevail for a period of three hours or longer.

Frost/Freeze Warning

Below freezing temperatures are expected.

Frostbite

Damage to body tissue caused by extreme cold. A wind chill of -20° Fahrenheit could cause frostbite in just 15 minutes or less. Frostbite causes a loss of feeling and a white or pale appearance in extremities such as fingers, toes, ear tips or the tip of the nose. If symptoms are detected – Seek medical care immediately!

Hypothermia

A condition that develops when the body temperature drops below 95°F. It is very deadly. Warning signs include uncontrollable shivering, disorientation, slurred speech and drowsiness. Seek medical care immediately!



Prepare Your Home & Family

- Prepare for possible isolation in your home by having sufficient heating fuel. For example, store a good supply of dry, seasoned wood for your fireplace or woodburning stove.
- Keep fire extinguishers on hand, and make sure everyone in your house knows how to use them.
- Learn how to shut off water valves (in case a pipe bursts).
- Know ahead of time what you should do to help elderly or disabled friends, neighbors or employees.

Prepare a Car Kit

- shovel & windshield scraper
- flashlight & extra batteries
- water & snack food
- matches
- blankets, extra hats, socks and mittens
- first aid kit with pocket knife
- booster cables & tow chain or rope
- sand or kitty litter
- emergency flares
- fluorescent distress flag

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Winter Storms & Extreme Cold

Dress for the Weather

- Wear several layers of loose fitting, lightweight, warm clothing rather than one layer of heavy clothing. The outer garments should be tightly woven and water repellent.
- Wear mittens, which are warmer than gloves.
- Wear a hat.
- Cover your mouth with a scarf to protect your lungs.

During a Winter Storm

If You Are Driving

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.
- Stay on main roads; avoid back road shortcuts.
- If a blizzard traps you in the car:
 - Pull off the highway. Turn on hazard lights and hang a distress flag from the radio antenna or window.
 - A Remain in your vehicle where rescuers are most likely to find you.
 - Run the engine and heater about 10 minutes each hour to keep warm. When the engine is running, open a downwind window slightly for ventilation and periodically clear snow from the exhaust pipe. This will protect you from possible carbon monoxide poisoning.
 - 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 - the use of lights, heat, and radio - with supply.
- ♦ Turn on the inside light at night so work crews or rescuers can see you.
- ♦ 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 airplane.
- ♦ Leave the car and proceed on foot if necessary once the blizzard passes.

If You Are Outdoors

- Overexertion is dangerous. 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 an existing medical condition worse.
- Cover your mouth. Protect your lungs from extremely cold air by covering your mouth when outdoors. Try not to speak unless absolutely necessary.
- 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.
- If symptoms of hypothermia are detected:
 - ♦ get the victim to a warm location
 - ♦ remove wet clothing
 - put the person in dry clothing and wrap their entire body in a blanket
 - ♦ warm the center of the body first
 - give warm, non-alcoholic or noncaffeinated beverages if the victim is conscious
 - get medical help as soon as possible.