

Winter Hazards

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What to do Before a Winter Storm

Winter storm warnings are reported by local weather forecasters and can be predicted with a reasonable degree of accuracy. Winter storms can bring a lot of snow, sleet, freezing rain, sub-zero temperatures, lots of ice and even blizzards. Preparing for winter storms can be life and property saving.

Know your 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.
- Winter Storm Warning: A winter storm is occurring or will soon occur in your area.
- Blizzard Warning: Conditions of sustained winds or frequent gusts of up to 35 miles per hour or greater and considerable amounts of falling or blowing snow (reducing visibility) are occurring or will soon occur in your area.

Winter-storm preparation tips:

- Double check to make sure that your emergency preparedness kit is complete, with fresh supplies. For more information on emergency kits please visit www.in.gov/dhs.
- Along with your kit keep extra blankets, warm clothes and a flashlight around the house. Know where they are located in case you have to find them in a power outage.
- Stock up on extra food and water before the storm because the power may go out or you might be snowed in for a few days.
- Make sure your home is properly insulated.
- Caulk and weather strip doors and windows to keep out cold air.
- Learn how to shut off water valves if a pipe bursts.
- Keep fire extinguishers on hand and know how to use them.

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- Consider what to use for emergency heat in case the electricity goes out (Fireplace, portable space heater, etc.). And remember emergency heating safety.
- If you rent, make sure you are familiar with the heating system and that it is safe to use.
- Remember to consider family members with special needs, such as babies. Keep extra prescription medicines available in case you are snowed or iced in. Don't forget your pets!
- If road conditions permit, fuel your car before the storm. It is a good idea to keep at least a half tank of gas in your car at all times during the winter months, to keep the fuel lines from freezing.
- Put extra blankets, clothes, food and water, ice scraper and a shovel in your car.

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The following are guidelines for what you should do during a winter storm.

If you are inside:

- Stay inside! Only make trips that are necessary for survival.
- Listen to your radio, television or NOAA Weather Radio for weather reports and emergency information.
- Eat regularly and drink ample fluids, but avoid caffeine and alcohol.
- Use proper safeguards when using fireplaces, space heaters, etc., to prevent accidental fires.
- When you do not have heat (i.e., a power outage) close off unneeded rooms, stuff towels under doors and cover windows.
- Maintain ventilations 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.
- Conserve fuel, if necessary, by keeping your residence cooler than normal.

If you are outside:

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- People, pets and livestock are susceptible to frostbite and hypothermia during winter storms; signs of frostbite and hypothermia include numbness, drowsiness, shivering, stumbling, slurred speech and a pale appearance.
- 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.
- Remove wet clothing. Working up a sweat trying to dislodge a vehicle can cause hypothermia if you do not change into dry clothing.
- Cover your mouth to protect your lungs from extremely cold air.
- Wear layers of loose-fitting clothing instead of a single thick layer. Wear mittens instead of gloves.
- If you see homeless people stranded in the cold, call your local authorities so they can find a shelter for them.

What to Do During an Extreme Cold Emergency

Extreme cold consists of temperatures significantly colder than normal. Extremely cold conditions can cause a number of health and safety concerns, including frostbite, hypothermia, carbon monoxide poisoning and fires (caused by alternate heating sources). Taking preventive action is your best defense. By preparing your home and car in advance for winter emergencies and by observing safety precautions during times of extremely cold weather, you can reduce the risk of weather-related health problems.

In general, if you are experiencing extremely cold conditions you should:

Protect yourself:

- Dress in several layers of lightweight clothing, which keeps you warmer than a single heavy coat.
- Mittens provide more warmth to your hands than gloves. Wear a hat, preferably one that covers your ears. Wear a scarf over your mouth to protect your lungs.
- Wear waterproof, insulated boots to keep your feet warm and dry and to maintain your footing on ice and snow.
- Take frequent breaks and stay hydrated when digging out or shoveling snow.

Protect yourself at home:

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- Be careful with candles – do not use candles for lighting if the power goes out. Use flashlights only.
- Inspect fireplaces and wood stoves yearly – use a sturdy fire screen with lit fires. Burn only wood – never burn paper or pine boughs.
- Use generators correctly – never operate a generator inside your home, including the basement or garage. Do not hook up a generator directly to your home’s wiring. The safest thing to do is connect the equipment you want to power directly to the outlets on the generator.
- Prevent frozen pipes – when the weather is very cold outside, open cabinet doors to let warm air circulate around water pipes. Let the cold water drip from the faucet served by exposed pipes. Running water through the pipe – even at a trickle – helps prevent pipes from freezing because the temperature of the water running through it is above freezing. Keep the thermostat set to a consistent temperature.
- Don’t overload your electrical outlets.
- Don’t forget your pets – bring them indoors. If you can’t bring them inside, provide adequate shelter to keep them warm and make sure they can access unfrozen water.
- If you plan on using an alternate heating source, never use a stove or oven to heat your home. Keep a glass or metal fire screen around the fireplace and never leave a fireplace fire unattended. If using a space heater, follow the manufacturer’s instructions on how to safely use the heater. Place it on the, hard, nonflammable surface. Turn the space heater off when you leave the room or go to sleep. Keep children and pets away from your space heater and do not use it to dry clothing.

Understand frostbite and hypothermia:

- Symptoms of frostbite include: numbness, flushed gray, white, blue or yellow skin discoloration and waxy feeling skin. If you or someone you know is experiencing any of these symptoms, seek medical attention immediately.
- Symptoms of hypothermia for adults include: shivering, exhaustion, confusion, fumbling hands, memory loss, slurred speech and drowsiness; and for infants; bright red, cold skin and very low energy.

What to do:

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- If you notice any of these signs, take the person's temperature. If it is below 95° F, the situation is an emergency – get medical attention immediately. If medical care is not available, begin warming the person, as follows:
 - Get the victim into a warm room or shelter.
 - If the victim has on any wet clothing, remove it.
 - Warm the center of the body first – chest, neck, head and groin – using an electric blanket, if available. Or use skin-to-skin contact under loose, dry layers of blankets, clothing, towels or sheets.
 - Warm beverages can help increase the body temperature, but do not give alcoholic beverages. Do not try to give beverages to an unconscious person.
 - After body temperatures have increased, keep the person dry and wrapped in a warm blanket, including the head and neck.
 - Get medical attention as soon as possible.

Winter Driving Tips

Hazardous driving conditions due to snow and ice on highways and bridges lead to many accidents, which is the leading cause of death during winter storms. By following these tips and advice, you will be ready for winter driving. The Indiana Department of Transportation and State Police remind you: “Ice and Snow, Take it Slow!”

Prepare a winter emergency kit for your vehicle. Supplies should include:

- At least two blankets or a sleeping bag
- Flashlight or battery-powered lantern and extra batteries
- Booster (jumper) cables
- Emergency flares
- Extra clothing, particularly boots, hats and mittens
- A steel shovel and rope to use as a lifeline
- Bottled water or juice and nonperishable high-energy foods (granola bars, raisins, nuts, peanut butter or cheese crackers)
- Thermos or container that won't allow liquids to freeze
- First-aid kit and necessary medications
- Sand or non-clumping cat litter for tire traction if your vehicle gets stuck in snow or ice

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- A cell phone and charger which can be adapted to vehicle use
- Ice scraper and snow brush
- Tire repair kit and pump
- Candle, matches, heat sticks/packs, lighters, hand-warmers, etc. (Be sure to crack the window if you using a heat source indoors.)
- Small tent or shelter half

Driving tips:

Before leaving home:

- Find out about the driving conditions and pay attention to weather reports on the radio.
- Remove any snow on your vehicle's windows, lights, brake lights and signals.
- Check your vehicle's tires, wiper blades, fluids, lights, belts and hoses.
- Let someone know your destination, route and when you expect to arrive.
- Avoid driving and take public transportation if possible.
- Become familiar with your vehicle's winter weather operating characteristics. Front-wheel-drive vehicles generally handle better than rear-wheel vehicles on slippery roads because the weight of the engine is on the drive wheels, improving traction.

On the road:

- If you need to turn on your wipers, you need to turn on your lights.
- Remember to drive well below the posted speed limit and leave plenty of room between cars.
- Be cautious of black ice. Roads that seem dry may actually be slippery and dangerous. Take it slow when approaching intersections, off-ramps, bridges or shady areas.
- Stay attentive and reduce speeds during times of limited visibility.
- Give snowplows room to work. The plows are wide and can cross the centerline or shoulder. Do not tailgate and try not to pass.
- Give yourself space, remember it takes your car extra time to stop on slick and snowy roads
- Brake early, brake slowly, brake correctly and never "slam on the brakes." Understand your vehicles brakes and how they work.
- When driving on ice and snow, do not use cruise control and avoid abrupt steering maneuvers.
- Take it slow when merging into traffic.

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- Be aware of what is going on ahead of you because actions by other vehicles will alert you to problems more quickly giving you that split-second of extra time to react safely.

What to do should you become stranded:

- Do not leave your car, it is the best protection you have.
- Keep the overhead light on when the engine is running so you can be seen (remember to keep the windows cracked).
- Tie a brightly colored cloth to the antenna for rescuers to see.
- Run the engine for 10 minutes every hour to stay warm.
- Keep the exhaust pipe free of blockage to prevent carbon monoxide poisoning.
- Don't panic! An idling car uses only one gallon of gas per hour.

Ice Safety

It is impossible to judge the strength of ice by its appearance, thickness, daily temperature or snow cover alone. Ice strength is actually dependent on a number of factors, including water depth under the ice, water area size, water chemistry, currents, and load distribution on the ice.

Some ice safety tips to remember:

- Wait to walk out on the ice until there are at least four inches of clear, solid ice. Thinner ice will support one person, but since ice thickness can vary considerably, especially at the beginning and end of the season, four inches will provide a margin of safety.
- Go out with a buddy and keep a good distance apart as you walk out. If one goes in the other can call for help, the companion can also attempt a rescue if one of you are carrying rope or other survival gear.
- Snowmobiles and ATVs need at least five inches, and cars and light trucks need at least 8-12 inches of good, clear ice.
- Wear a life jacket. Life vests or float coats provide excellent flotation and protection from hypothermia (loss of body temperature).
- Carry a pair of homemade ice picks tied together with a few yards of strong cord that can be used to pull yourself up and onto the ice if you do fall in. Be sure they have wooden handles so if you drop them they will not sink straight to the bottom.

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- Avoid driving a vehicle on ice.
- Check the water access and if there are signs indicating an operating aeration system on the lake. Aerators keep areas of water open to provide oxygen for fish and the ice can be weakened many yards beyond where the ice is actually open.
- Ice skating on frozen ponds, creeks and other small bodies of water can provide hours of exercise and entertainment, but venturing onto ice of an unknown thickness can very quickly lead to a life threatening emergency. It is impossible to judge the strength of ice by its appearance, thickness, daily temperature or snow cover alone. Ice strength is dependent on a number of factors, including water depth under the ice, water area size, water chemistry, currents and load distribution on the ice. As a rule of thumb, four inches of clear, solid ice will usually provide a stable platform.
- As with other forms of winter activities, wearing several layers of non-cotton, insulating material will provide important insulation and warmth. If you fall through the ice, the layers will also help trap air and provide a small amount of flotation. Gloves and a fleece or knit wool hat are also important to insulate and protect appendages. A US Coast Guard-approved, non-inflating personal flotation device with a pair of ice rescue picks attached is also strongly suggested.
- Part of safely enjoying ice activities is the knowledge of what to do if you or someone else falls through the ice. If you hear the ice beginning to crack, you should immediately crouch or lie down with your hands in front of you. This position lowers your center of gravity, spreads out your weight and will give you more control if you end up through the ice. Shuffling your feet will reduce the stress on the ice surface as well.
- If you do fall through the ice, try to keep your head up and out of the water. Sudden submersion in very cold water causes a reflex action to gasp for air. Keeping your head up helps prevent water inhalation.
- If you do become submerged, look up to find your way back to the surface. Do NOT swim toward light spots. Those areas are sunlight being diffused by intact ice and snow. The hole you fell through will appear as the darkest spot because the light is being reflected from the surface of the water.
- Once your head is above water, move toward the ice shelf by outstretching your arms and slowly kicking your feet to bring your legs up behind you and level your body. Slowly kick and pull yourself up onto the ice shelf. If the ice gives way, continue kicking and pulling until you are completely out of the water and back on ice that can support your weight. NEVER GIVE UP.
- Once you are successfully upon the surface of the ice, do NOT stand up. Rather, slowly and gently roll

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away from the hole. You can roll all the way to shore if necessary. This technique distributes your weight over a wider surface area reducing the possibility of falling back through.

- Once on shore, avoid walking or standing up. Victims need to be transported to the hospital horizontally to avoid potentially fatal complications.

Evacuating Ahead of the Storm

Decide ahead of time if you will be able to stay warm in your home without power. If you do not have a generator or a gas-powered space heater, and don't believe you will be able to insulate your home well enough to stay warm, consider evacuating now to an alternate location with loved ones, or to a public shelter before the storm hits and travel conditions become more dangerous.

Hoosiers are instructed to contact their local emergency management agency or Red Cross chapter to inquire about public shelter locations and availability before evacuating. If you do decide to evacuate to a public shelter, don't go empty handed.

If you must evacuate to a shelter, bring the following items with you:

- Bedding including blankets, sleeping bag, pillow
- Warm clothing including boots
- Medicine or other essential medical supplies
- Food and water
- Items for entertaining children: books, toys, puzzles, etc.

High Winds Pose Additional Threats

Safety tips during strong wind:

- If possible, park your vehicle in a garage.
- Close garage door and all other exterior doors and windows.
- Stay inside. Move to the lowest level of your home or to an interior room away from windows and other glass objects.
- If you are outside, stand clear of roadways or train tracks, as a gust may blow you into the path of an oncoming vehicle.
- Use handrails where available on outdoor walkways and avoid elevated areas such as roofs.

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- Watch for flying debris. Tree limbs may break and street signs may come loose during strong winds.

If you are driving in high wind:

- Keep both hands on the wheel and slow down.
- Watch for objects blowing across the roadway and into your path.
- Keep a safe distance from cars in adjacent lanes as strong gusts could push a car outside its lane of travel.
- Take extra care in a high-profile vehicle such as a truck, van, SUV or when towing a trailer, as these are more prone to be pushed or even flipped by high wind gusts.
- If winds are severe enough to prevent safe driving, get onto the shoulder of the road and stop, making sure you are away from trees or other tall objects that could fall onto your vehicle. Stay in the vehicle and turn on the hazard lights until the wind subsides.

In the event of a downed power line:

- Report downed lines to your local utility company as soon as possible and call 9-1-1 if the downed power line poses an immediate safety threat.
- Avoid anything that may be touching downed lines, including vehicles or tree branches. Wet or snow-covered ground can conduct electricity. Warn others to stay away.
- Avoid anything that may be touching downed lines, including vehicles or tree branches.
- If a line falls on your car, stay inside the vehicle. Take care not to touch any part of the metal frame of your vehicle. Call 9-1-1. Do not exit the car until help arrives and advises you to do so, unless the vehicle is on fire. To exit, open the door, but do not step out. Jump, without touching any of the metal portions of the car's exterior, to safe ground and quickly get away.
- If you see someone who has been shocked and may be in direct or indirect contact with a power line, do not try to touch them. You may become a second victim. Get fire and medical attention as quickly as possible by calling 9-1-1.
- Never drive over downed power lines. Even if they are not energized, they can become entangled in your vehicle. For more information about preparing for and staying safe during severe winter storms, visit www.in.gov/dhs/getprepared.

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Preparing for Power Outages

During a power outage:

- Do NOT call 9-1-1 to report a power outage. Instead, contact your utility company. Calls to 9-1-1 should be reserved for life-threatening emergencies only.
- Open all cabinet doors and leave all hot and cold water taps slightly open so they drip continuously. This will help prevent pipes from freezing.
- If the power goes out, note the time of the outage and keep refrigerator/freezer doors closed to help keep perishable food cold. Perishable foods, including meat, dairy, eggs and cooked vegetables need to be stored at or below 41 degrees Fahrenheit.
- Listen to your battery-powered radio to find out about current weather conditions and when the power might be restored.
- Unplug some of your major appliances. When the power comes back on, a power surge could harm sensitive equipment. To avoid a power surge when the electricity returns, turn off computers, TVs, stereos and other unnecessary electronic equipment at the power source.

Tips for staying safe and warm during a power outage:

- Use a fireplace, wood stoves or other combustion heaters only if they are properly vented to the outside.
- Exercise caution when heating with any alternative heating devices, as well as propane appliances and older wall or floor gas furnaces.
- Never use a charcoal or gas grill indoors—the fumes are deadly.
- Never attempt to heat your home with an oven. Carbon monoxide can build up in your home if the oven is left on for an extended period of time.
- Check that you have a working carbon monoxide detector.
- Avoid lighting your home with candles during a power outage. Never leave lit candles unattended.
- Dress to stay warm -- wear layers, including a sweater, sweatshirt or even a jacket.

Insulating your home:

- Keep garage doors, storm doors and window shutters closed.

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- Close blinds and drapes or cover windows with a blanket to help prevent heat from escaping through the glass.
- Place rolled-up towels or blankets at the base of doors and windows to prevent cold air from drafting in.
- Remember that heat rises, so the highest level in your home is likely to be the warmest.

Medical conditions

Individuals who rely on electricity to operate at-home oxygen or dialysis machines or to refrigerate insulin are advised to contact their local emergency management agency as soon as possible to inquire about emergency care plans.

Individuals who rely on transportation to medical facilities for life-sustaining treatment, such as dialysis, should also contact their local emergency management agency for information about emergency transportation plans.

Contact information for all county emergency management agencies is available at http://www.in.gov/dhs/files/sanitized_compact_directory.pdf.

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