

Winter Weather Information: How to be safe this winter!

Iowa Road Condition Update: Phone 1-800-288-1047

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- I. Winter storm Safety checklist:
 - A. Before the storm arrives:

- * Check Battery powered equipment.
- * Portable radio, NOAA Weather radio or television.
- * Flashlights.
- * Extra supply of batteries.
- * Emergency cooking facilities.
- * Be sure emergency camp stoves are filled
- * Emergency lighting.
- * Plan to use a battery operated light supply instead of candles - and extra batteries.

- * Emergency Power
 - * If you have a generator, make sure it has been tested under load, is tuned up and has fuel, oil and coolant.
 - * Stock extra supplies of food that requires no cooking or refrigeration in case of power failure. (Non-perishable, high-energy foods such as peanut butter, raisins and other dried fruit, candy; canned food and non-electric can opener). Have drinking water stored.
 - * Have well stocked first-aid kit and know how to use it.
 - * Have adequate supply of medications.
 - * Have extra baby items stored.
 - * Supply of supplemental fuel for heating - wood, coal, kerosene, heating fuel, LP gas tank.
- Be aware of the threat of carbon dioxide build-up from these devices.
- * Make sure coal or oil burning stoves, fireplaces, heaters and furnaces are installed to manufacturers standards to prevent fire hazards; do not overheat.
 - * Winterize the car before the winter season.
 - * Put together disaster supplies kit for each car.

B. During the Storm:

- * Stay indoors. If you must go out, avoid overexertion.
- * Don't kill yourself shoveling snow - it is extremely hard work. The cold puts and extra strain on your body. Heart attack or stroke is a possible result even for younger people with good stamina.
- * Take frequent breaks, pace yourself, have a warm non-alcoholic beverage handy.

II. Preparing Your Home For Winter:

A. Energy Tips.

- * Caulk and weather-strip windows and doors.
- * Have your home insulated by a professional contractor; attic insulation and walls.
- * Install storm windows or cover windows with plastic.
- * Have your furnace checked.
- * Have space heaters and wood stoves professionally installed; follow manufacturers instructions.

B. Emergency Supplies.

- * For emergency electrical lighting, maintain an extra 12 volt car battery, wire, alligator clips, 12 volt trouble lights with extra light bulbs. With the proper equipment, you may be able to run a 12 volt TV, VCR radio, police scanner or cell phone off car battery.
- * Portable radio, NOAA Weather radio or television.
- * Flashlights.
- * Extra supply of batteries.
- * Emergency cooking facilities and fuel.
- * If you have a generator, make sure it has been tested under load, is tuned up and has fuel, oil and coolant.
- * Stock extra supplies of food that requires no cooking or refrigeration in case of power failure. (Non-perishable, high energy foods such as peanut butter, raisins and other dried fruit, candy; canned food and non-electric can opener).
- * Have drinking water stored.
- * Have well stocked first-aid kit; know how to use it.
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- * Have extra baby items stored.
- * Supply of supplemental fuel for heating - wood, coal, kerosene, heating fuel, LP gas tank.

III. Winter Weather:

A. Understanding terms used by NWS:

- * Freezing rain, freezing drizzle, ice storm means rain falling onto a surface with a temperature below freezing is expected to coat surfaces with ice; heavy means the weight of the ice will cause significant damage.
- * Sleet indicates rain drops that freeze into small particles of ice; sleet can be mixed with rain.
- * Snow means a steady falling of snow will continue for several hours without letup unless occasional or intermittent is used.
- * Snow flurries - snow falling for short duration's at intermittent periods; visibility may be reduced to an eighth of a mile or less; accumulations are generally small.
- * Snow squalls are brief, intense falls of snow with gusty surface winds.
- * Blowing snow - snow lifted from the surface by the wind and blown about to a degree that horizontal visibility is greatly restricted.
- * Blowing and drifting snow - result from strong winds and falling snow or loose snow on the ground.
- * Drifting snow - strong winds will blow falling snow or loose snow on the ground into significant drifts.
- * Blizzards - sustained strong winds of at least 35 mph with blowing and falling snow are whipped in such great quantities that, visibility is reduced below ¼ mile for 3 hours or more.
- * Heavy snow means a fall of 6 or more inches is expected in the next 12 hours.
- * Ground Blizzard - combination of blowing and drifting snow after a substantial snowfall has ended.
- * Various winter weather advisories - winter weather conditions are expected to cause significant inconveniences and may be hazardous. If caution is exercised, these situations should not become life threatening. The greatest hazard is often to motorists.
- * Winter Storm Watch - Severe winter weather conditions may affect your area (freezing rain, sleet, or heavy snow may occur separately or in combination).
- * Winter Storm Warning - Severe winter weather conditions are imminent.
- * Heavy Snow Warning - Snowfall of at least 6 inches in 12 hours or 8 inches in 24 hours is expected.
- * Blizzard Warning - Considerable falling and/or blowing snow reducing visibility below ¼ mile and sustained winds of at least 35 miles per hour lasting over 3 hours.
- * High Wind Warning - sustained winds of at least 40 miles per hour or gusts of at least 50 miles per hour or greater are expected to last for at least 1 hour.
- * Cold wave means a rapid fall in temperatures within a 24-hour period that will require emergency protective action.

B. Keeping posted on weather conditions:

- * Listen to NOAA Weather Radio if you have one in your area.
- * Keep ahead of the winter storm by listening to the latest weather warning and bulletins on radio and television.
- * Be alert to changing weather conditions.
- * Avoid unnecessary travel.

IV. Driving Hazards.

A. Safe driving.

- * If storm test or exceeds your limitations, seek available refuge immediately.
- * Plan your travel and select primary and alternate routes.
- * Travel by daylight and use major highways.
- * Keep the radio turned on for the latest weather information and other emergency advice.
- * Try not to travel alone; two or three persons are preferable.
- * Travel in convoy with another vehicle if possible.
- * Always fill gasoline tank before entering open country, even for a short distance.
- * A Citizens Band (CB) radio or cellular phone can be very useful in emergencies.
- * Drive with caution, carefully, defensively. Don't save time by traveling faster than road and weather condition permit.
- * Let someone know your destination, your route, and when you expect to arrive. If your car gets stuck along the way, help can be sent along your predetermined route.

B. Emergency kits for your car: Carry a winter storm car kit, especially if cross-country travel is anticipated.

C. Suggested Winter Storm Car Kit:

- * Blankets or sleeping bags.
- * Matches and candles.
- * Basic tools including a knife.
- * Empty 3 lb. coffee can with plastic cover.
- * Facial tissue.
- * Paper towels.
- * Extra clothing, gloves, warm socks, headgear.
- * High calorie, non-perishable food.
- * Compass.
- * Road maps.
- * First aid kit.
- * Shovel.
- * Sack of sand, grit, kitty litter or gravel.
- * Flashlight/signal light (fresh batteries).
- * Windshield scraper.
- * Jumper (booster) cables.
- * Two tow chains.
- * Fire extinguisher.
- * Ax.
- * Bright colored cloth to tie to antenna.
- * Flares.

D. Car maintenance during cold weather: Get your car winterized before the storm season begins; take care of the following before winter strikes:

- * Ignition system.
- * Battery (new one every 5 years).
- * Lights (make sure all are working).
- * Tire tread.
- * Cooling system.
- * Fuel system.
- * Lubrication.
- * Exhaust system.
- * Heater.
- * Brakes adjusted.

- * Wiper blades.
- * Defroster.
- * Snow tires installed.
- * Chains.
- * Antifreeze.
- * Proper grade oil.
- * Maintaining a full gas tank will keep water out of your fuel.

E. If a Blizzard Traps You.

- * Avoid overexertion and exposure.
- * Stay with your vehicle; do not try to walk to safety.
- * Tie bright piece of cloth to antenna for rescuers to see.
- * Don't panic.
- * Keep fresh air in your car.
- * Beware of carbon monoxide and oxygen starvation.
- * As you sit, keep moving your arms and legs to keep blood circulating and to stay warm.
- * Turn on dome light at night to make vehicle visible to work crews.
- * Keep watch. Do not permit all occupants of car to sleep at once.
- * Don't waste gas by running the heater continuously. Start the car and use the heater for about 10 minutes every hour. Keep the exhaust pipe clear so fumes won't back up into the car. Keep one window away from the blowing wind slightly open to let in air.
- * Do not eat snow - it will lower your body temperature. Melt it first.

V. Watch Your Step.

- * Walk carefully on snowy icy sidewalks.
- * Keeping sidewalks clear helps those who depend on them.
- * Use sand and chemical snow/ice melters to keep walks clear of ice from freezing and thawing.

VI. Keeping your home warm safely and Fire Safety.

A. Furnaces.

- * Have furnace professionally inspected annually.
- * Leave repairs to qualified repair personnel.
- * Check furnace controls and emergency shut-offs.
- * Have the chimney inspected.
- * Keep trash and combustibles away from furnace.

B. Fireplaces, Wood Stoves.

- * Have chimney inspected annually and cleaned to prevent soot and creosote buildup.
- * Do not use flammable liquids to start or accelerate fire.
- * Use a glass or metal screen in front of the fireplace opening.
- * Keep flammable materials away from mantel.
- * Make sure fire is out before you go to sleep.
- * Never close the damper with hot ash in the fireplace.
- * Never discard hot ashes inside or near the home. Place them in metal container outside and away from the house.

C. Kerosene Space Heaters.

- * Check to make sure heater is in good working order.
- * Inspect exhaust parts for carbon buildup.
- * Be sure it automatically shuts off if tipped over.
- * Use proper room ventilation to prevent carbon monoxide buildup.
- * Use only fuel recommended by the manufacturer.
- * Store fuels in approved metal containers in ventilated area outside the house.
- * Never fill the heater while it is operating or hot.
- * Avoid overfilling the fuel tank on the heater because cold fuel will expand as it warms up.
- * Refueling should be done out of doors.
- * Keep young children away from the space heater.
- * Loose clothing can be easily ignited.

E. Electric Space Heaters.

- * Make sure the circuit is rated for the heater being used.
- * Do not overload the same circuit with other appliances.
- * Use only extension cords which have the necessary rating to carry the amp load.
- * Avoid using in bathrooms or where contact with water is possible.

F. Heat Pads and Electric Blankets.

- * Follow manufacturers instructions on care and use.
- * Do not use safety pins.
- * Do not leave unattended. When you leave them, turn them off.
- * Do not use them on persons who have lost feeling in extremities - the heat may be too hot and burn them.

G. Fire Safety During the Holidays

- * Use only non-combustible decorations such as tinsel; be especially careful with spray and angel hair decorations
- * Decorative lights
- * Don't overload outlets and circuits
- * Inspect carefully and repair or replace worn or frayed cords or other defects.
- * Use care in windows where curtains can ignite easily.
- * Do not leave on all night. Use a timer to turn lights on and off automatically.
- * Candles.
- * If you must use candles, place carefully and NEVER leave unattended.
- * Do not burn candles on a Christmas tree. Do not allow any open flames near the tree.
- * Christmas trees.
- * Live trees should be fresh as possible. Hold the tree upright and thump the base on the ground a few times; if the needles fall off, the tree has begun to dry.
- * Before you mount your tree in a stand, cut an inch or two off the bottom so it will absorb water more easily.
- * Flame-retardants, whether homemade or commercial, might not be fully effective if applied to only part of the tree.
- * Always keep the base in water and check it daily.
- * Keep tree away from stairways; trees should never block hallways, doorways, or exits to prevent escape.
- * Keep tree away from fireplaces, radiators, room heaters, and other sources of heat to slow the drying process.
- * Natural trees should be on display for no more than two weeks.

- * Dispose of tree soon after the holidays, before it dries out. Take it outside, to a dump or designated trash pick-up area.
- * Don't burn your tree indoors in a fireplace or furnace.
- * Artificial trees should be flame resistant. Use the same care with an artificial tree as with a live one.
- * Do not use electric lights on metal trees.
- * Toys, trains, or any device that generates sparks should be kept away from the tree.
- * When lit, the tree should not be left alone. All electrical decorations should be disconnected at night or when leaving the house.
- * Smoke detectors make great gifts.

H. Smoke detectors.

- * Make sure every level of the home has a working smoke detector and be sure to check and clean it on a monthly basis.
- * Change the batteries every six months; do it when you change the clocks for daylight savings time changes.

I. Fire safety.

- * Never use a blowtorch or open flame to thaw frozen water pipes. Use UL labeled device such as a hand held dryer. Or open every faucet completely, remove pipe insulation, wrap pipes in rags and pour hot water over the pipes.
- * Have a home fire plan. If windows are used as emergency exits, practice using them; make sure all windows open easily. Have home escape ladders for second floors.
- * Keep the fire hydrant near your home clear of snow, in the event it is needed.
- * Never use a range or an oven as a supplementary heating devise. It is a fire hazard and a source of toxic fumes.
- * Never burn charcoal indoors (carbon monoxide hazard). Do not attempt to use your grill as supplemental heat indoors - use it and all portable cooking units to cook outdoors only.
- * Keep handy simple tools and equipment needed to fight a fire should the help of local fire department not be available.
- * Have fire extinguishers and learn how to use them effectively.

G. If fuel must be conserved:

- * Keep the house cooler than usual and close off some rooms temporarily (that do not have plumbing in or under them).
- * Stuff towels or rags in cracks under doors.
- * Cover windows at night.
- * Wear layers of loose fitting, light weight warm clothing.

H. If heat goes out:

- * Keep water pipes from freezing by wrapping them in pipe insulation or newspapers covered with plastic to keep out moisture.
- * Let each faucet drip to avoid freezing.
- * As a last resort, to keep pipes from bursting, shut off the main valve to the house and drain the pipes at the lowest point.
- * Turn of gas or electricity to hot water heater and drain.
- * Put anti-freeze in the sinks to prevent the traps from freezing.

VII. Animals, Pets and Livestock.

- * Haul extra feed to feeding areas before storm arrives. Feeding at frequent intervals is important.
- * A storm lasting more than 48 hours requires emergency feed methods.
- * Provide water tanks with heaters to provide water. Cause of death to cattle during and after a storm is often dehydration, not cold or suffocation.
- * Move into sheltered areas, esp. young livestock. Provide non-confining shelter from the wind. Be aware that shed type shelters may cause over crowding with consequence of overheating and respiratory disorders.

VIII. Clothing.

- * Make sure each member of you family has a warm coat, gloves or mittens, hat and water-resistant boots.
- * Wear loose-fitting, light weight, warm clothing, in several layers; layers can be removed to prevent perspiring and subsequent chill.
- * Outer garments should be tightly woven, water repellent, and hooded. The hood should protect much of your face and cover your mouth to ensure warm breathing and protect your lungs from the extremely cold air. If you don't have a hood, cover your mouth to protect your lungs.
- * Entrapped, insulating air, warmed by body heat, is the best protection against cold.
- * Layers of protective clothing are more effective and efficient than single layers of thick clothing.
- * Mittens, snug at the wrists are better protection than fingered gloves.
- * The body loses three-quarters of it heat through the head. Wear a wool hat or stocking cap.

XI. Health.

A. Wind Chill Index.

- * Understand the hazards of wind chill.
- * A very strong wind combined with a temperature slightly below freezing can have the same chilling effect as a temperature nearly 50 degree Fahrenheit lower in a calm atmosphere. Arctic explorers and military experts have developed what is called the wind chill factor, which shows the combined effects of wind and temperature as equivalent calm air temperatures (calm-air, as used in wind chill determinations actually refers to the conditions created by a person walking briskly at 4 mph under calm wind conditions). In effect the index describes the cooling power of the air on exposed flesh. As the wind increases, heat is carried away from a person's body at an accelerated rate, driving down the body temperature. Animals are also affected by wind chill.

B. Frost Bite.

- * Frostbite is damage to body tissue caused by that tissue being frozen. 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 re-warm affected areas. However if the person is also showing signs of hypothermia, warm the body core before the extremities.

C. Hypothermia: Low body Temperature.

- * Warning signs- uncontrollable shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness, and apparent exhaustion
- * Detection - take the person's temperature. If below 95 degrees Fahrenheit, immediately seek medical care.
- * If medical care is not available, begin warming the person slowly. Warm the body core first. If needed, use your own body heat to help. Get the person into dry clothing, and wrap them in a warm blanket covering the head and neck. Do not give the person alcohol, drugs, coffee or any hot beverage; warm broth is better. Do not warm extremities (arms and legs) first. This drives the cold blood toward the heart and can lead to heart failure.

D. Overexertion: heart attacks, strokes.

- * Avoid overexertion. Don't kill yourself shoveling snow - it is extremely hard work.
- * The cold puts an extra strain on your body. Heart attack or stroke is a possible result even for younger people with good stamina.
- * Take frequent breaks, pace yourself.
- * Have a warm non-alcoholic beverage handy.
- * Ask a friend or neighbor to help with the heavy work.
- * Keep a thermos of warm beverage close by.

E. Carbon Monoxide.

- * Never use charcoal indoors to cook or heat.
- * Always provide source of fresh air when using any type of space heater.
- * If your car gets stuck in the snow, make sure the exhaust system is clear of snow to prevent back up of carbon monoxide. Leave a window open opposite of the blowing wind when running the engine to use the heater.
- * Never use your kitchen stove/burners as a source of heat.

X. Plumbing

Frozen water pipes not only cause a temporary inconvenience but the ice in the pipe can swell to the point of bursting the pipe. An eighth inch crack in a pipe can spew up to 250 gallons of water a day, wrecking floors, furniture and keepsakes. Copper and PVC pipes can burst. Frozen pipes are normally easy to prevent.

A. Before cold weather comes:

- * Insulate pipes in crawl space, attic or other unheated areas. Your hardware store can recommend insulation that is appropriate and easy to install.
- * Heat tape or thermostatically controlled heat cables can be used to wrap pipes.
- * Use only products approved by an independent testing organization, such as Underwriters Laboratories, Inc.
- * Use products appropriate for their intended use (exterior or interior).
- * Use caulking or insulation to seal leaks that allow cold air near pipes such as around electrical wiring, dryer vents and pipes. With severe wind and extreme cold, a tiny opening can let in enough cold air to freeze pipes.
- * Disconnect garden hoses. The faucet cannot drain and trapped water may freeze and break the faucet or cause the pipe inside the house to freeze and burst.

- * If practical, use an indoor valve to shut off and drain water from pipes leading to outside faucets. This reduces the chance of freezing in the short span of pipe just inside the house.
- * Make sure everyone in the family knows where the water shut-off valve is and how to open and close it.

B. When the temperature drops:

- * Open the hot and cold water faucets where the pipes are located on an outside wall and allow just a trickle to flow overnight.
- * Open cabinet doors to allow heat to get to un-insulated pipes under sinks and appliances near exterior walls.

C. If you are away:

- * Set the thermostat in your house no lower than 55 degrees
- * have a friend or neighbor check your house daily to make sure it is warm enough to prevent freezing
- * Shut off and drain water system.(If you have a sprinkler system for fire protection, it will be deactivated when you shut off the water).

D. If pipes freeze

- * Pipes may be frozen if you turn on the faucet and nothing comes out.
- * Leave the faucet on and call a plumber.
- * If you detect that pipes have frozen and burst, turn off the water at the main shut-off valve; leave the water faucets turned on.
- * Never try to thaw a pipe with a torch or open flame. Sparks or the heat from the pipe can combust surrounding materials and burn the house to the ground.
- * A hair dryer is a safer choice as long as care is taken to avoid electrocution (avoid using around standing water). Start by warming the pipe close to the faucet and work towards the coldest section of pipe.

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