



About Winter Storm

Winter storms can range from a moderate snow over a few hours to a blizzard with blinding, wind-driven snow that lasts for several days. Some winter storms are large enough to affect several states, while others affect only a single community. Many winter storms are accompanied by dangerously low temperatures and sometimes by strong winds, icing, sleet and freezing rain. Regardless of the severity of a winter storm, you should be prepared in order to remain safe during these events.

Know the Difference

Winter Storm Outlook - Winter storm conditions are possible in the next 2 to 5 days.

Winter Weather Advisory - Winter weather conditions are expected to cause significant inconveniences and may be hazardous. When caution is used, these situations should not be life threatening.

Winter Storm Watch - Winter storm conditions are possible within the next 36 to 48 hours. People in a watch area should review their winter storm plans and stay informed about weather conditions.

Winter Storm Warning - Life-threatening, severe winter conditions have begun or will begin within 24 hours. People in a warning area should take precautions immediately

How to Prepare for a Winter Storm

- Winterize your vehicle and keep the gas tank full. A full tank will keep the fuel line from freezing.
- Insulate your home by installing storm windows or covering windows with plastic from the inside to keep cold out.
- Maintain heating equipment and chimneys by having them cleaned and inspected every year.
- If you will be going away during cold weather, leave the heat on in your home, set no lower than 55° F.

Put Together a Supply Kit

- Water—at least a 3-day supply; one gallon per person per day
- Food—at least a 3-day supply of non-perishable, easy-to-prepare food
- Flashlight
- Battery-powered or hand-crank radio (NOAA Weather Radio, if possible)
- Extra batteries
- First aid kit
- Medications (7-day supply) and medical items (hearing aids, extra batteries, glasses, contact lenses, syringes.)

- Multi-purpose tool
- Sanitation and personal hygiene items
- Copies of personal documents (medication list and pertinent medical information, proof of address, deed/lease to home, passports, birth certificates, insurance policies)
- Cell phone with chargers
- Family and emergency contact information
- Extra cash
- Baby supplies (bottles, formula, baby food, diapers)
- Pet supplies (collar, leash, ID, food, carrier, bowl)
- Tools/supplies for securing your home
- Sand, rock salt or non-clumping kitty litter to make walkways and steps less slippery
- Warm coats, gloves or mittens, hats, boots and extra blankets and warm clothing for all household members
- Ample alternate heating methods such as fireplaces or wood- or coal-burning stoves

Remaining Safe During a Winter Storm

- Listen to a NOAA Weather Radio or other local news channels for critical information on snow storms and blizzards from the National Weather Service (NWS).
- Bring pets/companion animals inside during winter weather. Move other animals or livestock to sheltered areas and make sure that their access to food and water is not blocked by snow drifts, ice or other obstacles.
- Running water, even at a trickle, helps prevent pipes from freezing.
- All fuel-burning equipment should be vented to the outside and kept clear.
- Keep garage doors closed if there are water supply lines in the garage.
- Open kitchen and bathroom cabinet doors to allow warmer air to circulate around the plumbing. Be sure to move any harmful cleaners and household chemicals up out of the reach of children.
- Keep the thermostat set to the same temperature both during the day and at night. By temporarily suspending the use of lower nighttime temperatures, you can prevent a costly repair job if pipes freeze and burst.
- Go to a designated public shelter if your home loses power or heat during periods of extreme cold.
- Avoid driving when conditions include sleet, freezing rain or drizzle, snow or dense fog. If travel is necessary, keep a disaster supplies kit in your vehicle.
- Before tackling strenuous tasks in cold temperatures, consider your physical condition and the weather factors.
- Protect yourself from frostbite and hypothermia by wearing warm, loose-fitting, lightweight clothing in several layers. Stay indoors, if possible.
- Help people who require special assistance; elderly people living alone, people with disabilities and children.

Cold-Related Emergencies

- Frostbite and hypothermia are two dangerous and potentially life-threatening emergencies. Learn how to care for these emergencies by taking a first aid class.

Caution: Carbon Monoxide Kills

- Never use a generator, grill, camp stove or other gasoline, propane, natural gas or charcoal-burning devices inside a home, garage, basement, crawlspace or any partially enclosed area. Locate unit away from doors, windows and vents that could allow carbon monoxide to come indoors.
- The primary hazards to avoid when using alternate sources for electricity, heating or cooking are carbon monoxide poisoning, electric shock and fire.
- Install carbon monoxide alarms in central locations on every level of your home and outside sleeping areas to provide early warning of accumulating carbon monoxide.
- If the carbon monoxide alarm sounds, move quickly to a fresh air location outdoors or by an open window or door.
- Call for help from the fresh air location and remain there until emergency personnel arrive to assist you.

Preventing and Thawing Frozen Pipes

Being prepared and informed may help you to avoid the messy and often expensive issue of frozen pipes. The American Red Cross provides information and suggestions around how to prevent water pipes in the home from freezing, and how to thaw them if they do freeze.

Why Pipe Freezing is a Problem

Water has a unique property in that it expands as it freezes. This expansion puts tremendous pressure on whatever is containing it, including metal or plastic pipes. No matter the "strength" of a container, expanding water can cause pipes to break. Pipes that freeze most frequently are those that are exposed to severe cold, like outdoor hose bibs, swimming pool supply lines, water sprinkler lines, and water supply pipes in unheated interior areas like basements and crawl spaces, attics, garages, or kitchen cabinets. Pipes that run against exterior walls that have little or no insulation are also subject to freezing.

Preventing Frozen Pipes

Before the onset of cold weather, prevent freezing of these water supply lines and pipes by following these recommendations:

- Drain water from swimming pool and water sprinkler supply lines following manufacturer or installer directions. Do not put antifreeze in these lines unless directed. Antifreeze is environmentally harmful, and is dangerous to humans, pets, wildlife, and landscaping.
- Remove, drain, and store hoses used outdoors. Close inside valves supplying outdoor hose bibs. Open the outside hose bibs to allow water to drain. Keep the outside valve open so that any water remaining in the pipe can expand without causing the pipe to break.
- Check around the home for other areas where water supply lines are located in unheated areas. Look in the basement, crawl space, attic, garage, and under kitchen and bathroom cabinets. Both hot and cold water pipes in these areas should be insulated.

- Consider installing specific products made to insulate water pipes like a "pipe sleeve" or installing UL-listed "heat tape," "heat cable," or similar materials on exposed water pipes. Newspaper can provide some degree of insulation and protection to exposed pipes – even ¼" of newspaper can provide significant protection in areas that usually do not have frequent or prolonged temperatures below freezing.

During Cold Weather, Take Preventative Action

- Keep garage doors closed if there are water supply lines in the garage.
- Open kitchen and bathroom cabinet doors to allow warmer air to circulate around the plumbing. Be sure to move any harmful cleaners and household chemicals up out of the reach of children.
- When the weather is very cold outside, 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.
- Keep the thermostat set to the same temperature both during the day and at night. By temporarily suspending the use of lower nighttime temperatures, you may incur a higher heating bill, but you can prevent a much more costly repair job if pipes freeze and burst.
- If you will be going away during cold weather, leave the heat on in your home, set no lower than 55° F.

To Thaw Frozen Pipes

- If you turn on a faucet and only a trickle comes out, suspect a frozen pipe. Likely places for frozen pipes include against exterior walls or where your water service enters your home through the foundation.
- Keep the faucet open. As you treat the frozen pipe and the frozen area begins to melt, water will begin to flow through the frozen area. Running water through the pipe will help melt ice in the pipe.
- Apply heat to the section of pipe using an electric heating pad wrapped around the pipe, an electric hair dryer, a portable space heater (kept away from flammable materials), or by wrapping pipes with towels soaked in hot water. Do not use a blowtorch, kerosene or propane heater, charcoal stove, or other open flame device.
- Apply heat until full water pressure is restored. If you are unable to locate the frozen area, if the frozen area is not accessible, or if you can not thaw the pipe, call a licensed plumber.
- Check all other faucets in your home to find out if you have additional frozen pipes.

Future Protection

- Consider relocating exposed pipes to provide increased protection from freezing.
- Pipes can be relocated by a professional if the home is remodeled.
- Add insulation to attics, basements and crawl spaces. Insulation will maintain higher temperatures in these areas.
- For more information, please contact a licensed plumber or building professional.

