



STATE OF CONNECTICUT
DEPARTMENT OF HOUSING



Cold Weather Advisory for CDBG-DR Recipients

During a recent cold snap with temperatures well below average winter weather for Connecticut, the Department of Housing received reports of frozen pipes in homes which have received CDBG-DR assistance. **With extreme temperatures, pipes in exterior walls and below the home as well as heating system drain lines in attics are at risk in all homes.** Elevated homes with open foundation systems are more exposed to wind and therefore may be especially prone to freezing. Each rehabilitation, reconstruction, and mitigation project in the disaster recovery program has been designed and completed according to State and local building code requirements, but these homes, like all homes, can still be susceptible in extreme, below-freezing temperatures.

Incidents involving a frozen pipe may not be the responsibility of the contractor under the CDBG-DR program. Contractor warranties under the CDBG-DR program guarantee project work ***only*** against defects in workmanship, materials, equipment and design furnished by the contractor, and not related to maintenance. Owners are responsible for notifying the contractor of any defects that arise during the warranty period and, when applicable, the contractor shall promptly remedy any defects in the work performed at its own expense and pay for any damage to the premises resulting from defects or neglect in the project work.

Absent a defect in workmanship, materials, equipment and design, the CDBG-DR program does not encompass frozen pipe issues. Accordingly, each homeowner has a responsibility to maintain completed work and should take additional steps to reduce the risk for frozen pipes.

Why Pipes Burst: Surprisingly, ice forming in a pipe does not typically cause a break where the ice blockage occurs. It's not the radial expansion of ice against the wall of the pipe that causes the break. Rather, following a complete ice blockage in a pipe, continued freezing and expansion inside the pipe causes water pressure to increase downstream -- between the ice blockage and a closed faucet at the end. It's this increase in water pressure that leads to pipe failure. Usually the pipe bursts where little or no ice has formed. Upstream from the ice blockage the water can always retreat back towards its source, so there is no pressure build-up to cause a break. Water has to freeze for ice blockages to occur. Pipes that are adequately protected along their entire length by placement within the building's insulation, insulation on the pipe itself, or heating, are safe. ([Insurance Institute for Business & Home Safety](#))

32° F is the freezing point for water. Pipes usually don't freeze until temperatures outside drop into the 20s or lower. In northern climates, where the temperatures regularly fall below freezing, modern homes tend to be well insulated and water pipes are located on the inner parts of the house for extra protection. However, in older homes this is not always the case.

Helpful Tips to Help Prevent Frozen Pipes

- Keep garage doors closed if there are water supply lines in the garage.
- **Set a reminder to turn on or plug in heat trace tape installed on plumbing lines.** Check with the installer or your product manual to find out the life expectancy of the tape and replace as needed. Without a thermostat, the cable has to be plugged in each time and might be forgotten.
- Ensure drafts at doors, windows and any wall perforations (e.g., dryer vents, attic doors, cable entry points, etc.) are contained.
- **Open kitchen and bathroom cabinet doors to allow warmer air to circulate around plumbing.** Move harmful cleaners & household chemicals out of the reach of children.
- When the weather is very cold outside, **turn on both hot and cold water faucets near the outside walls to allow a small trickle of water to run.**
- When heating systems are located in an attic, open your loft hatch on cold days so warmer air can circulate up from the floors below.
- **Leave the heat on in your home set to a temperature no lower than 55° F at all times, even if you are away.**
- Become familiar with the location of your main shut off and other valves. Contact your contractor if new plumbing was installed and ask for the location of the shut off.
- Consider shutting off and draining the water system before you leave for extended periods during cold weather months. To drain the system, shut off the main valve and turn on every water fixture in the house (both hot and cold lines) until water stops running. It's not necessary to leave the fixtures open, since the system is filled mostly with air at that point and not subject to freezing. When returning to the house, turn on the main valve and let each fixture run until the pipes are full again.
- Check to ensure wrap insulation is firmly in place and sealed tight to piping. Consider adding insulation to PVC sanitary piping, especially if there is no full foundation enclosure. Traps are vulnerable to freezing and owners should ensure any heat trace tapping is maintained, when installed.
- Contact Energize Connecticut's Home Energy Solutions (<https://www.energizect.com/>) program to schedule a money-saving "energy makeover" for your home. Certified technicians will come to your home to search for and seal air leaks, replace inefficient lightbulbs, and take other measures that will provide you with energy savings from day one. They can also offer tips on how to better insulate your home.

What to Do If Pipes Freeze or Burst

- If you have a leak, turn the water off immediately to prevent water damage and call a licensed plumber to make repairs.
- Take proper precautions to avoid electrical shock from being in or near standing water.
- Remove items like furniture and cover any carpet (where practical) near where the frozen pipe is. If the pipe does eventually burst, this should help minimize damage.
- Take an inventory of any damaged property or possessions.

- In the event of loss or damage, contact your local insurance claims office, and a representative will assist you.
- Contact your local insurance claims office to help you locate a vendor specializing in emergency water mitigation services that can properly dry out the damaged area.

How to Thaw Frozen Pipes (from the [American Red Cross](#))

- 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 cannot thaw the pipe, call a licensed plumber.
- Check all other faucets in your home to find out if you have additional frozen pipes. If one pipe freezes, others may freeze, too.

Links to Other Resources on How to Protect Your Home

- American Red Cross: <http://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/winter-storm/frozen-pipes>
- Consumer Reports: <https://www.consumerreports.org/home-maintenance-repairs/how-to-keep-pipes-from-freezing/>
- Aquarion Water Company: <https://www.aquarionwater.com/CT/preventing-frozen-water-pipes-and-meters>
- WTNH News 8: <http://wtnh.com/2017/12/13/preventing-the-pipes-in-your-home-from-freezing/>
- CBS New York: <http://newyork.cbslocal.com/2018/01/08/raised-homes-are-more-prone-to-frozen-pipes-expert-warns/>
- Travelers: <https://www.travelers.com/resources/home/maintenance/how-to-prevent-frozen-pipes>
- State Farm Mutual: <https://www.statefarm.com/simple-insights/residence/dont-let-pipes-freeze-and-steps-to-take-if-they-do>
- Liberty Mutual: <https://www.libertymutual.com/preventing-water-damage/frozen-pipes>
- This Old House – How to Prevent Frozen Pipes: <https://youtu.be/BVItL66doqw>
- This Old House – How to Drain Pipes for the Winter: <https://youtu.be/nw0W4Bdta3g>
- How to Shut Off the Main Water Supply to My House?: <https://youtu.be/RvE6n7rTGnM>
- Freezing and Bursting Pipes: http://disastersafety.org/wp-content/uploads/Freezing-Bursting-Pipes_IBHS-White.pdf