

The Water Source

WINTER 2011

PUBLIC WATER SUPPLY DISTRICT NO. 3 OF JOHNSON COUNTY

PREPARING YOUR WATER PIPES FOR WINTER

There are three central causes of frozen pipes: Quick drops in temperature below freezing, poor insulation, and thermostats set too low. Here are a few steps you can take:

Extreme Weather Conditions:

- A trickle of hot and cold water might be all it takes to keep your pipes from freezing. Let warm water drip overnight, preferably from a faucet on an outside wall.
- Keep your thermostat set at the same temperature during both day and night.
- Open cabinet doors to allow heat to get to un-insulated pipes under sinks and appliances near exterior walls.

Before You Leave:

- Set the thermostat in your house no lower than 55°F (12°C).
- Ask a friend or neighbor to check your house daily to make sure it's warm enough to prevent freezing.
- Shut off and drain the water system. Be aware that if you have a fire protection sprinkler system in your house, it may be deactivated when you shut off the water.

What do you do if your pipes freeze?

- If you turn on your faucets and nothing comes out, leave the faucets turned on and call a plumber.
- Never try to thaw a pipe with a torch or other open flame because it could cause a fire hazard.
- You may be able to thaw a frozen pipe with the warm air from a hair dryer. Start by warming the pipe as close to the faucet as possible, working toward the coldest section of pipe.
- If your water pipes have already burst, turn off the water at the main shutoff valve in the house; leave the water faucets turned on.

THERMAL EXPANSION

Thermal expansion occurs in all systems. When the heating element significantly raises the temperature of the water, the volume of the water increases. During no-flow periods in a system, pressure reducing valves, backflow preventers, and other one-way valves prevent the expanded water from returning to the community water supply. Since water is not compressible, the extra volume created by expansion can cause a rapid increase in pressure in the piping. Often the pressure will exceed the setting of the temperature and pressure safety relief valve. This will result in a loss of hot water and shorten the life of the relief valve.

For example, water heated from 70°F to a thermostat setting of 140°F in a 40 gallon hot water heater will expand by almost one-half gallon.

The addition of a hot water heater expansion tank can both resolve and

prevent high water pressure. Excessive pressure can seriously compromise the durability, performance and the efficiency of the system. A hot water heater expansion tank is a cost effective solution to thermal expansion and high water pressure. For more information about thermal expansion and backflow prevention please visit the water quality page at: pwsd3.com.



Do you have...

- **Banging water pipes.**
- **Leaking water pipes.**
- **Dripping faucets.**
- **Excessive dishwasher and clothes washer noise and/or breakdowns.**

Watts Regulator Co. states “Generally anything above 60 lbs. of pressure is considered to be high.”

How much is too much water pressure?

While some might consider high water pressure a good thing, water pressure that is too high can cause annoying and expensive damage. High water pressure is a major cause of leaks, eroded washers, pipe damage, and wasted water. Symptoms of water pressure induced problems include leaks in multiple fixtures in the home, banging water pipes, and leaks that only appear intermittently such as toilets running occasionally without being used.

Every home should have Water Pressure Reducing Valves. A water pressure regulator is a compact, inexpensive device that controls the amount of pressure that is allowed to flow through your water pipes. Having high water pressure is not only damaging to your water pipes but can also add to the cost of water and energy bills.

For more information about water pressure reducing valves please visit the water quality page at: pwsd3.com.

