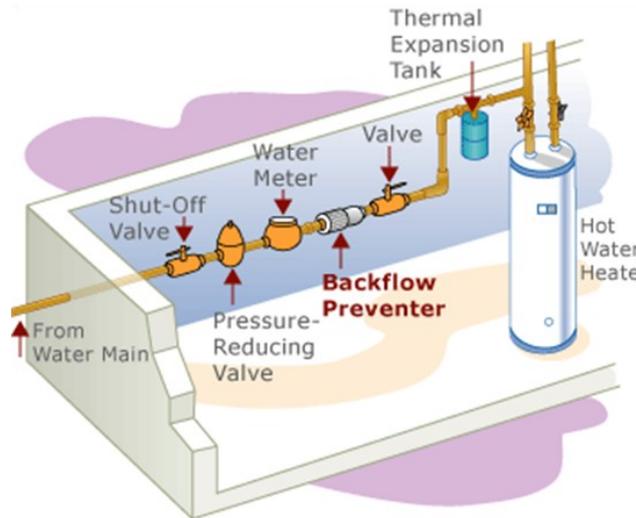
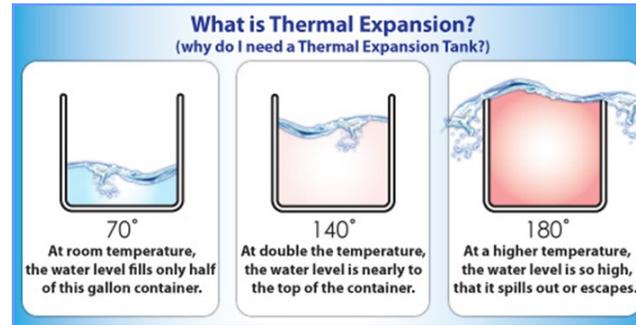


Your Water Heater and Thermal Expansion

When water is heated, it expands in volume as its temperature rises. If a backflow device is not installed, the water could potentially expand and exceed the capacity of the heater and be forced back into the piping system. With a backflow device installed, water cannot expand into the City's water main. The best solution to thermal expansion is to control the pressure it generates within the normal, safe operating range, well below emergency setting of a water heater's pressure relief valve.

Help us preserve the quality of our drinking water supply at the City of DeLand. If at any time you have any questions or concerns about cross-connections or how to prevent them, contact Mike Blendinger in Water Distribution.

*Thank you for helping
keep our drinking
water safe!*



**City of DeLand
Water Distribution
1101 South Amelia Avenue
DeLand, FL 32724**

**Mike Blendinger, Cross Connection Inspector
Phone: (386) 626-7200
Email: Blendinger@deland.org**

Protecting Your Home Against Cross- Connections



"The Athens of Florida"

What is a “Cross-Connection”?

Without proper protection devices, something as useful as your garden hose has the potential to poison your home’s water supply. In fact, over half of the nation’s cross-connections involve unprotected garden hoses.

Across-connection is a permanent or temporary piping arrangement that can allow your drinking water to be contaminated if a backflow condition occurs.

Typical Residential Cross-Connections

- ◆ Hose Bibbs
- ◆ Lawn Irrigation
- ◆ Jacuzzis
- ◆ Swimming Pools
- ◆ Toilet Ball-cocks



What is “Backflow”?

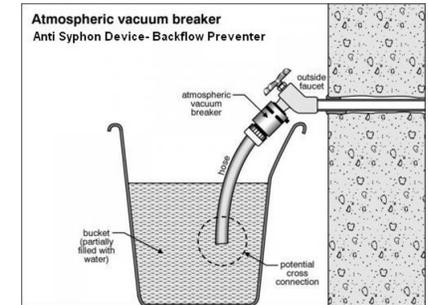
It’s just what it sounds like. The water is flowing in the opposite direction from its normal flow. With the direction of the flow reversed due to a change in pressures, backflow can allow contaminants to enter our drinking water system through cross-contamination.

A potentially hazardous cross-connection occurs every time someone uses a garden hose sprayer to apply insecticides or herbicides to their lawn. Another cross-connection occurs when someone uses his or her garden hose to clear a stoppage in their sewer line.

Without a backflow prevention device between your hose and hose bibb (spigot or outside faucet), the contents of the hose and anything it is connected to can backflow into the piping system and contaminate your drinking water.

This hazardous situation can sometimes affect more than a single home. In 1977, an entire town in North Dakota had to be rationed drinking water from National Guard water trucks while the Town’s water distribution system was flushed and disinfected following contamination by D.D.T.

Investigation determined that two residents spraying DDT had made direct cross-connections to their homes. A backflow condition occurred. DDT had been sucked through the home piping systems and out into the town’s distribution system.



Preventative Measures

Backflows due to cross-connections are a serious plumbing problem. They can cause sickness and even death. However, they can be avoided by the use of proper protection devices. Each spigot at your home should have a hose bibb vacuum breaker installed. This is a simple, inexpensive device which can be purchased at any plumbing or hardware store. Installation is easy as attaching your garden hose to a spigot.

