

Backflow Prevention

Backflow prevention is an essential part of our clean water maintenance, for keeping our drinking water safe and free from backflow. Backflow Solutions, Inc. (BSI Online) administers our Backflow Prevention Program, ensuring backflow prevention devices are installed and maintained in compliance with federal, state and local codes.

What is backflow?

Backflow is the reversal of water flow from its normal or intended direction, causing non-potable water to flow into the public water supply. Whenever a water utility connects a customer to the utilities distribution system, the intention is for the water to flow *from* the distribution system *to* the customer. However, the flow of water could be reversed from the customer back into the distribution system. If cross-connections exist within the customer's plumbing system when backflow occurs, then it is possible to contaminate the public water supply.

Flow reverses due to system pressure greater than line pressure



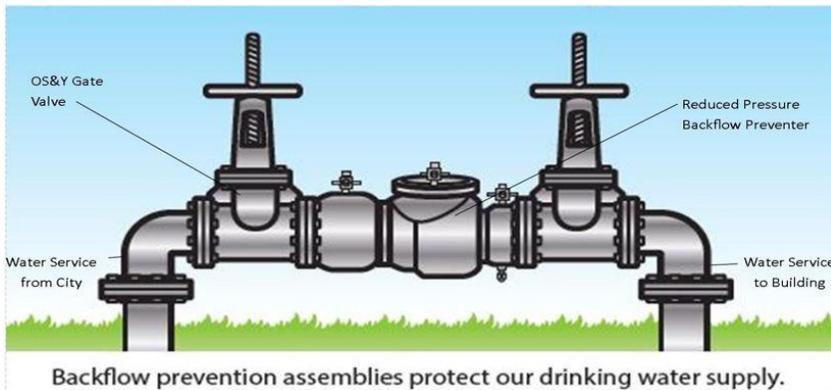
The two types of Backflow

Backpressure: Is backflow caused by a downstream pressure, which is greater than the upstream or supply pressure in a public or consumer's potable water system.

Backsiphonage: Occurs when backflow caused by a negative pressure (I.E., A vacuum - or partial vacuum) enters into a public water or consumer's potable water system.

Backflow Prevention

Backflow prevention devices are used to protect our potable water supply from contamination due to backflow. A backflow preventer is a means or mechanism used to systematically prevent backflow. The basic way of preventing backflow is through either eliminating a cross-connection, or providing a barrier against unwanted backflow. Without these barriers, water from medical facilities, restaurants, public pools, irrigation systems and other sources could travel into the City's water supply and contaminate the drinking water.



Backflow prevention units are typically located by your water meter, or by the curb in its own housing. Kentucky plumbing codes and standards [[815 KAR 20:120, Section 2 \(7\)](#)] for backflow preventers include:

- Air gap
- Reduced pressure principle back pressure backflow preventer
- Double check valve assembly
- Pressure type vacuum breaker
- Atmospheric type vacuum breaker
- Barometric loop

How do I get my backflow device tested?

The City of Murray has partnered with BSI Online to assist in administering the backflow program in your community.

If you received a notice, you will need to do the following:

- [Hire a Registered Backflow Tester](#)
- Provide your Customer Confirmation Number (CCN), located on the notice, to your Tester
- Check your test report status using your CCN at [BSIOnlineTracking.com](#)

The backflow tester will need to:

- Perform the required test
- Submit all test reports through [BSIOnlineTracking.com](#)
- Pay a fee per test report submitted

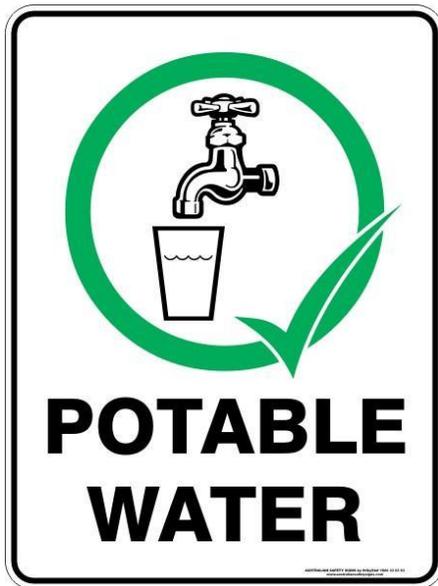
Does my device *need* to be tested?

Backflow prevention assemblies, much like many other mechanical devices, have seals, springs and moving parts. As such, these various parts are subject to wear and tear, and overtime wind up going bad. Testing by a Certified BFPA technician is required upon installation, and in most cases, annually thereafter to ensure that the device is working as intended. If your device was tested and did not pass, you will have **15** days to have the device repaired and retested.

Potable vs. Non-potable water?

Potable water simply means that it is safe to consume. This water has been properly treated so that it is safe for drinking, bathing, and cooking.

Non-potable water is NOT meant for consumption, and unsafe to drink. Non-potable water is water that has not gone through the same treatment process as potable water, OR was once treated, though has since become contaminated via chemicals, pollution, gasses, etc.



City of Murray

The city of Murray takes several actions to ensure potential backflow contamination does not occur. Public Drinking Water Safety is our number one concern, thus the health and well-being of both our consumers, wholesale customers and employees is of utmost importance. With proper maintenance, protocol and regulation, we can continue giving our communities and your family the safe, clean water that they deserve.

If you have any additional questions or concerns, please contact BSI:

(bsionline@backflow.com) (800-414-4990)

Thank you for your cooperation and for helping to protect our water resources.