

Evansville Cross Connection Control FAQs

What is a cross connection?

A cross connection is any physical connection between a drinking water supply system and any source of potential contamination. Under certain circumstances, the flow of water could reverse and pull or push potential contaminants into the drinking water supply. This is called a backflow, which is a serious public health hazard.

What causes a backflow?

There are two conditions that can cause a backflow:

Backpressure is when the water supply is connected to a device that creates pressure, such as a boiler or pressure washer. The pressure created can be greater than the water supply, thereby creating backflow.

Backsiphonage occurs when there is a loss of pressure in the water supply, such as when a fire hydrant is opened or a water main breaks. Air and non-drinkable substances – like bacteria from animal droppings and chemicals sprayed on yards – are siphoned into lawn sprinkler heads and weak pipe fittings. These contaminants could be pulled into drinking water supply lines, such as those connected to the kitchen sink.

What is a backflow preventer?

The backflow preventer is a device that eliminates cross connection and stops the reverse flow of non-drinkable water back into the public drinking water supply.

What are the most common backflow preventers?

Air Gap Separation – a method of preventing backflow through the use of an unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a plumbing device or fixture, tank or other device and the flood level rim of the receptacle.

Double Check Valve Assembly – a backflow prevention device that incorporates an assembly of check valves, with shut-off valves at each end and appurtenances for testing. Most commonly installed in fire sprinkler systems.

Pressure Vacuum Breaker – an approved backflow prevention device designed to prevent only back siphonage and which is designed for use under static line pressure. Applicable to customers with lawn irrigation systems.

Reduced Pressure Zone – an approved backflow prevention device that incorporates two (2) spring loaded check valves, an automatically operating differential relief valve located between the (2) check valves. Applicable to commercial/ industrial customers and to some lawn irrigation systems.

How do I know if I have a backflow preventer?

In most instances, backflow preventers will be the device after an incoming service. For example, for residential customers that have an irrigation system, the backflow device will be located after the meter close or up to a home.

What are my responsibilities as a customer related to backflow prevention?

The installation and annual testing of backflow devices are required by Evansville Municipal Code ([Article II. 13.15.050](#)) and Indiana Administrative Code ([327 IAC 8-10-7 and 8-10-8](#)). It is the responsibility of EWSU customers to hire a licensed and/or certified backflow tester.

Who can test my backflow prevention device?

To find a licenses and/or certified backflow tester, click the following link: [Evansville Area Backflow Testers.](#)

How is test submitted to EWSU?

Once a backflow preventer is tested, the certified backflow tester will a hang tag with the required test results on or near the tested device. The tester will then submit the test results to EWSU through Aqua Backflow website: www.aquabackflow.com/trackmybackflow/

Who is Aqua Backflow?

ESWU works in partnership with Aqua Backflow to implement and oversee the cross connection program. Aqua Backflow monitors water connections throughout the City of Evansville, including most commercial and industrial establishments, boiler systems, swimming pools and lawn irrigation systems. Customers with or who need backflow preventers should receive test/install due notices with the designated due date.

What if I am not using my lawn irrigation system this year, do I need to test my backflow preventer?

The backflow preventer must still be tested annually even if the system is not in use.

What if I no longer wish to use my lawn irrigation system?

If a customer chooses to disconnect their lawn irrigation system, the customer will need to decide if the removal will be temporary; which involves removing the backflow preventer and leaving much of the surrounding piping in place to make re-installation easier. The customer may also decide on permanent removal which involves removing much of the surrounding system piping. Once the customer decides, they should call EWSU at 812-436-7015 to confirm removal.