

## What is a Cross Connection?

Plumbing cross-connections are defined as actual or potential connections between a potable and non-potable water supply. This may cause a backflow condition or a serious health hazard to occur.

### What is Backflow?

Backflow is when the water in your pipes (the pipes after the water meter) goes backwards (the opposite direction from normal flow).

There are two situations that can cause a backflow condition.

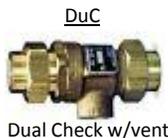
*“Back Pressure”* – a pressure greater than the supply pressure that may cause backflow.  
*(High-pressure boiler or pressure washer)*

*“Back Siphonage”* – the creation of a backflow as a result of negative pressure.  
*(Water main break or use of fire hydrants)*

Along with the required backflow preventers and their regular maintenance, site inspections or surveys may be performed at properties that present a potential hazard to our water systems:

\* *External* (“site”, or “containment”) – to protect the City’s water supply from cross connections on the customer’s premises.

\* *Internal* (“hazard”, or “isolation”) – to protect the customer from potentially hazardous cross-connection in their own system.



### What is considered a potential hazard?

Cross-connections can occur at many points throughout a distribution system and a community's plumbing infrastructure. Cross-connections can be identified by looking for physical interconnections (or arrangements) between a customer's plumbing and the water system. Some examples of backflow incidents that occur are:

▶ Chemicals backflowing (backsiphoning) through a hose into indoor plumbing.

***Over ½ of the nations cross-connections are from unprotected garden hoses!***

▶ Carbonated water from a restaurant's soda dispenser entering a water system due to backpressure.

▶ Backsiphonage of chemicals from industrial buildings into distribution system mains.

▶ Backflow of boiler corrosion control chemicals into a building's water supply.



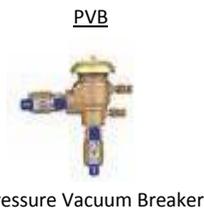
There are numerous, well-documented cases where cross-connections have been responsible for contaminating drinking water, and have resulted in the spread of disease.

The problem is a dynamic one, because piping systems are continually being installed, altered, or extended.



### **November, 2011 – Columbia, SC:**

(WLTX) News19 anchor Andrea Mock discovered her home was missing an irrigation system backflow preventer after brown water ran through her tap. When DHEC came to test her water, they found an elevated level of 2, 4, D, an herbicide. Mock said, "As soon as I found out we didn't have this part, I called DHEC because I wanted to see what we had been drinking. And that test would only show what was in the water on that particular day. There's no telling what we might have consumed over the past five years. Without this part, anything we put on our grass had the potential to come into our water."



The City of Evansville  
Water & Sewer Utility  
1500 Waterworks Rd  
Evansville, IN 47720

**Important information** from the  
City of Evansville regarding the safety  
of your water supply!

**Evansville Water Customer**

**Evansville's**  
**Cross Connection Control Program**

The City of Evansville proudly supplies millions gallons of safe, clean water every day to our customers. Our water quality exceeds the standards established by the United States Environmental Protection Agency (EPA) and IDEM Regulations.

Congress established the Safe Water Drinking Act in 1974 to protect human health from contaminants in the drinking water.

The IDEM and Indiana Plumbing Codes require every water supplier to develop and implement a comprehensive cross connection control program for the elimination of all existing cross connections and the prevention of all future cross connections.

The Evansville Cross Connection Control Program is designed to safeguard public health. We ask for your cooperation with our program and its enforcement.

The City of Evansville has contracted with *Aqua Backflow* to assist with the Water Utility's Cross Connection Control Program.

*Aqua Backflow* may contact you to request information, require a backflow test, or more. Your cooperation and courtesy is appreciated as we perform the required tasks for a complete cross connection control program. Please note that you may be asked to test or install backflow protection where needed in accordance to the State of Indiana Plumbing Code & IDEM Regulations

***Let's keep our drinking water safe.***

***Aqua Backflow***

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[www.AquaBackflow.com](http://www.AquaBackflow.com)  
[www.TrackMyBackflow.com](http://www.TrackMyBackflow.com)

***For backflow stories, please visit***  
[www.BackflowCases.com](http://www.BackflowCases.com)



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CBBP



Carbonated Beverage  
Backflow Preventer

AVB



Atmospheric Vacuum  
Breaker