

# PROTECT YOUR DRINKING WATER

## What is a Cross Connection?

A Cross Connection is a physical connection (piping configuration) between the public drinking water system and anything else, including another water supply that can allow pollutants or contaminants to backflow into the public drinking water system.

## What is Backflow?

Backflow is the reversal of flow from a residential or commercial system back into the public drinking water system. A backflow incident could carry dangerous pollutants or contaminants into our public drinking water supplies making them unsafe to use.

Backflow can occur if your plumbing system is physically connected (a cross connection) to any source of contamination or pollution. Examples of possible cross connections include landscape sprinkler systems, hose attachments for utility sinks, chemical tank trucks, chemical sprayers, and garden hoses.

The International Plumbing Code, as adopted by the state of Utah and the Utah Public Drinking Water Rules requires that all cross connections be eliminated or protected against backflow by installing an approved backflow prevention device or assembly.

## What Can Backflow Into Your Water?

Many public drinking water systems are contaminated each year by pollutants or contaminants that backflow into the water system through unprotected cross-connections. Identifying and eliminating or protecting cross connections is a matter of public health!

## Backflow Prevention Assemblies

Backflow prevention assemblies provide protection against contamination or pollution. A cross connection is defined as, "Any actual or potential connection between a potable water system and any other source or system through which it is possible to introduce into the public drinking water system any used water, industrial fluid, gas or substance other than the intended potable water." Cross connections and backflow incidences in the State of Utah have resulted in dangerous, highly contaminated water unexpectedly entering public drinking water systems. Irrigation waters, oil, toxic boiler compounds, sewage, pesticides, and other extremely dangerous contaminants have found their way into Utah public drinking water systems due to cross connections.

LEARN  
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FROM THE  
DANGERS  
ASSOCIATED  
WITH  
CROSS  
CONNECTIONS!

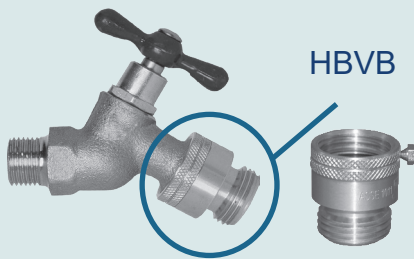


# WHAT YOU CAN DO TO HELP PREVENT CROSS CONNECTIONS

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are very minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality but can also affect your health. So, what can you do? Do not make or allow improper connections at your homes. When the cross connection is allowed to exist at your home, it will affect you and your family first.

## Your Garden Hose and Threaded Potable Outlets

A large majority of backflow incidents are created by the common garden hose. Modern plumbing codes require that all threaded potable water outlets (hose bibs or sill cocks), except water heater drains and clothes washer connections, be protected by a non-removable hose bib vacuum breaker or an atmospheric vacuum breaker. The installation of a hose bib vacuum breaker (HBVB) is an inexpensive way to protect against contamination happening through your garden hose.



## Kitchen and Bathroom Faucets

Kitchen and bathroom faucets are generally designed with an adequate air gap between the end of the faucet and the flood rim of the sink. They are manufactured so that a hose can not be attached to the end of the faucet. Slip-on hose connections can defeat the protection of the airgap and should not be used!

## Shower Sprayers

Hand held shower sprayers and other similar hose attachments also pose a problem. If submerged in the water, back-siphonage can occur. This problem can be corrected by installing a special hose vacuum breaker.

## Laundry Room

Your washing machine has air gaps built-in at the factory. Utility sink faucets must be equipped with a hose bib vacuum breaker or atmospheric vacuum breaker.

## Water Softener Drain Line

Drain lines from water softeners and water conditioners are typically connected to the sewer line. An air gap must be provided between the end of the drain line and the sewer line eliminate the possibility of siphoning raw sewage back into the drinking water system.

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## Toilets

Many toilets are equipped with ballcock assemblies that do not meet code. These assemblies can allow water from the toilet tank to be siphoned back into the drinking water supply. Anti-siphon ballcock assemblies must be used to protect against back-siphonage.

## Landscape Sprinkler Systems

The Plumbing Code requires that all landscape sprinkler systems connected to the public water system be equipped with an approved backflow prevention device or assembly.

Any sprinkling system that can utilize both public drinking water supplies and secondary water supplies must follow specific plumbing regulations to prevent raw water from entering the drinking water system!

For Questions and to Learn more about Cross Connection Prevention:

Contact Us