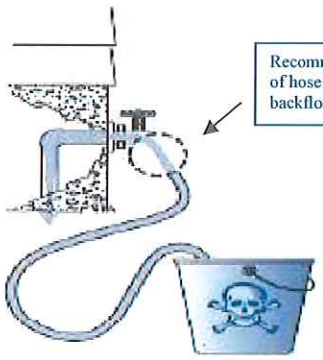
RESIDENTIAL
CROSS-CONNECTION CONTROL

Help us protect your drinking water supply from accidental pollution. We encourage you to learn more about cross-connections, what you can do to prevent water backflow and keep your drinking water clean and safe.

The most common Cross-Connection is a garden hose.

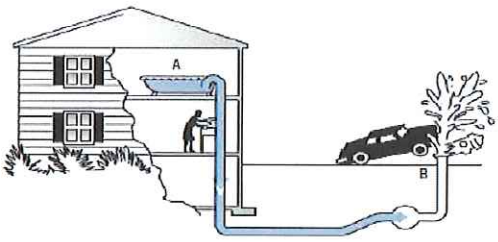
Rhode Island Department of Health
401-222-5960 / RI Relay 711
www.health.ri.gov/drinkingwaterquality



What Is A Cross-Connection?

Cross-connections can be found in all plumbing systems. They are physical connections between a drinking water pipe and something that is not safe to drink—such as a garden hose, swimming pool, lawn sprinkler, or boiler.

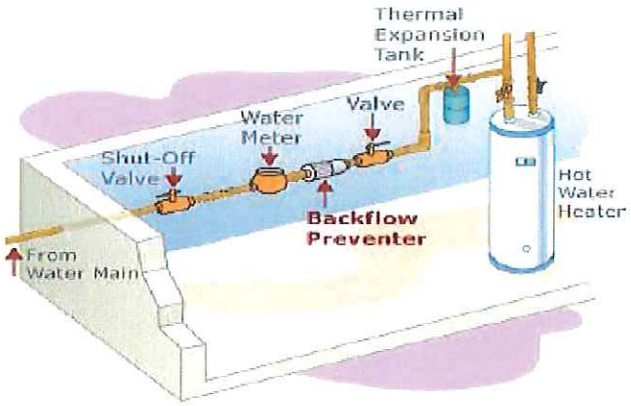
"Backflow" can happen if there is a water main break, water line repair, fire, or during a period of high water usage. These events may lower the pressure in the street enough to reverse the flow of water from your house. Also, if a pipe breaks inside a building, water can flow backwards from one room to another.



Backflow happens often in a water system. Back-flowing water can suck bacteria, sewage, or chemicals from other parts of the plumbing system into your drinking water pipes or those of your neighbors. Unless you take steps to protect the cross- connections in your home, your drinking water may become contaminated.

What Is Your Water Supplier Doing?

Protecting the drinking water supply from contamination through cross-connections is a shared responsibility. Your public water supplier is responsible for the water that is delivered to your home. As the consumer, you are responsible for the water on your property and in your house.



Many industrial and commercial customers on use water in manufacturing, in their heating or cooling system, or for other non-drinking uses. These customers are required to install a "backflow prevention device" where the water enters their building to prevent any possible contamination of the water mains. These devices are tested annually to make sure that they are working properly.

We may also require some residences to install a backflow prevention device at the meter, including any homes with a pool, a fish pond, lawn irrigation system or a private well on the property. These activities could contaminate the water mains if there was a backflow situation. If you are required to install a device, you will be responsible for the costs of materials, installation and testing.

This is a typical non-testable backflow device. If installed near the water meter it will stop water from going backwards from your house into the water pipes in the street.

Be advised that if your house needs to have a backflow prevention device installed at the meter, your plumber should make sure that you also have a thermal expansion tank. If not, pressure can build up in your pipes and cause damage to your piping or hot water heater.

How Can I Prevent Backflow inside my house?

The best way to protect yourself, your family, and your neighbors from polluted water is to either remove the cross-connections in your pipes or protect them against backflow. Many plumbing fixtures have built-in backflow protection. Others require installation of a separate backflow preventer. Generally, the installation of plumbing in compliance with the plumbing code will protect you from contamination.

The most common cross-connection in a home is the outside garden hose. If the end of the hose is submerged in a bucket of cleaning fluid, fish pond or other open container during a low pressure event, this water could get sucked back into your water pipes. You can prevent this by installing a "hose bib vacuum breaker". These devices screw directly on the faucet. They are inexpensive and available at hardware and home improvement stores. You do NOT need a plumber. (These devices should be removed in the winter.)

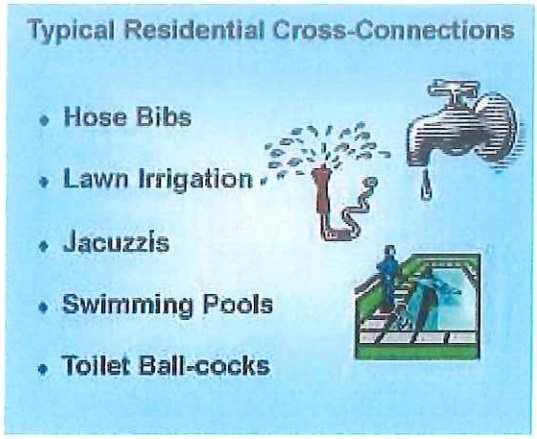
Lawn chemicals or cleaners to wash your car or house siding can cause serious health problems if ingested. NEVER attach spray applicators to your hose unless you have a backflow device on the faucet!!

When filling a pool or fish pond, never leave the end of the hose submerged in the water. Also, always remember to leave the hose nozzle "open" when not in use, so that the water drains out of the hose. Otherwise, pressure in the hose could ruin the hose bib vacuum breaker.

Underground lawn irrigation systems can leave puddles of standing water around the sprinkler heads. These puddles could become contaminated with animal waste or fertilizer, so these systems are required to have a testable backflow device. These must be installed by a plumber and tested annually to make sure they are working properly.

Why Your Action Matters.

The effort of installing a backflow preventer on your pipes is far outweighed by its ability to protect you, your loved ones, and your neighbors from contaminated water.



More Information…

Your water supplier has a Cross- Connection Control program. This program is mandated by state law (RIGL 46-13-22) and Department of Health regulations. To learn more about the Rhode Island Cross-Connection Control Program, contact:

BARBARA (HUI) CHEN

Sanitary Engineer
Center of Drinking Water Quality
Providence, RI 02908
Tel. 401-222-7769
Hui.Chen@health.ri.gov

Protect Your Drinking Water!

DON'T !

☒ Submerge hoses in buckets, swimming pools, tubs, sinks, ponds, or any standing water
☒ Use spray attachments without a backflow prevention device
☒ Leave the hose nozzle closed when not in use
☒ Use a hose to unplug blocked toilets or sewer pipe

DO !

☑ Keep the ends of hoses off the ground and clear of all possible contaminants
☑ Install "hose bib vacuum breakers" on all faucets in and around your home.
☑ Install an approved backflow prevention device on all underground lawn irrigation systems. (Remember, these systems require a plumbing permit.)
☑ Contact your water supplier or Department of Health if you see any suspicious or unauthorized use of a fire hydrant.