

Residential Plumbing Cross-Connection Survey

Help us protect Liberty's drinking water by eliminating unprotected cross-connections! One way to do this is by completing the Residential Cross-Connection Plumbing Survey.

Scan the QR code below to complete the survey online. If you'd prefer to print the survey and mail it in, visit the Cross-Connections page on www.libertyenergyandwater.com.



Hose Bib Vacuum Breaker

Common Cross-Connection Examples

Here are some tips for what NOT to do.

- Do NOT allow a garden hose to sit in a puddle, watering can, or bucket of soapy water. Tip: Avoid submerging hoses (or faucets) and unscrew the hose at the spigot after use.
- Do NOT connect to auxiliary water sources (private well, spring, cistern). This is not allowed when connected to a public water supply. Tip: Disconnect all auxiliary sources. It's the law!

Cross-Connection and Backflow Prevention

Here are some tips for what you should do.

- Keep the ends of hoses off the ground and clear of all possible contaminants.
- Install a backflow preventer, such as a residential dual check, on your home's water service line.
- Install hose bib vacuum breakers on all faucets in and around your home. They are cheap and can be found in most hardware stores.
- Contact Liberty if you see any suspicious or unauthorized use of a fire hydrant.

Contact Us

For more information, visit www.libertyenergyandwater.com

If you have any questions or concerns, please contact us and ask for the cross-connections specialist.



Cross-Connection Control Program

Residential Customers

Protecting Our Drinking Water

What is Cross-Connection?

A cross-connection is an actual or potential connection between the safe drinking water (potable) supply and a source of contamination or pollution. Cross-connections must be properly protected or eliminated.

What is a Backflow?

Water distribution systems are designed so that water flows in one direction from the distribution system to the consumer. However, certain conditions can cause an undesirable backflow, in which the water flows in the opposite direction and carries other contaminants or pollutants into the public drinking water supply through a cross-connection.

What Causes Backflow?

There are two conditions that contribute to backflow:

Backpressure occurs when non-potable water pressure is greater than potable water pressure.

Back-siphonage occurs when the supply line pressure falls below atmospheric pressure, creating a vacuum. When this happens, a reversal of flow can take place from the non-potable side to the potable water supply.

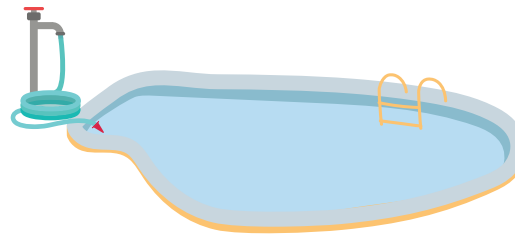
An easy way to visualize backflow is to think about sucking on a straw. Your mouth provides negative pressure to transfer water out of the glass. If you stop sucking on the straw, the water in the straw drains back into the glass. Now the glass contains all the water that was in the straw, as well as some water that was in your mouth. The illustration below shows how backflow could occur in your home.

1



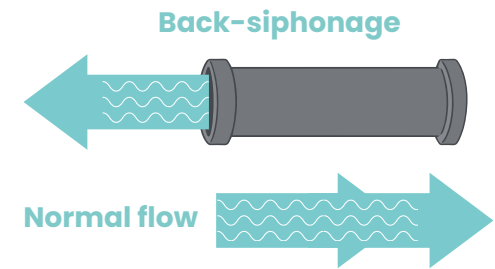
Let's say a fire hydrant gets hit by a car in your neighborhood. The water in the main is normally under pressure. However, the break causes a sudden drop in pressure. This creates BACKFLOW from your home.

2



Now, let's say you have a garden hose running and it is laying in a water source like a pool. This creates a CROSS-CONNECTION.

3



Because of the suction created by the drop of pressure in the public water system's main, the water in the pool will be sucked back through the hose pipe into your internal plumbing, and then out into the public drinking water system.

4



When your water returns to normal, the contaminated water from the pool is now in the public water system's main and in your house plumbing. Contaminated water can create serious health risks.