

# Residential Cross-Connection and Backflow Protection

**Important  
Notice**



Hose bib vacuum breakers are effective backflow prevention devices, appropriate for both inside and outside hose connections. They're low-cost, available at most hardware and home improvement stores, and simply screw onto your hose bib. In just a few seconds, you can easily help protect your family's drinking water from contamination.



## What You Need to Know

### What Is a Cross-Connection?

A cross-connection is a connection between a drinking water pipe and a water source that is not safe to drink. Potential cross-connections can be found in all plumbing systems. A backflow can occur if a cross-connection is present.

### What Is Backflow?

Backflow is the undesired reverse of the water flow in drinking water pipes. This backward flow of water can occur when:

- ▶ The pressure created by equipment or a system such as a boiler or air-conditioning is higher than the water pressure inside the water pipe. This is called "back pressure."
- ▶ The pressure in the water pipe drops due to an unusual occurrence like a water main break or extreme water demand causing the water to flow backward inside the water pipe. This is called "back siphonage."

Backflow is a problem that many water consumers are unaware of—a problem that each and every water customer has a responsibility to help prevent.

### What Is a Residential Cross-Connection?

The most common source of residential cross-connection is a garden hose. For example, the end of the hose might be submerged in a non-potable (undrinkable) source or it might be connected to a fertilizer sprayer. If the water pressure drops, contaminated water could get sucked back into your water pipes on an unprotected system. This could pose a health risk to you and your family.

### How Can You Prevent Backflow?

You can prevent a backflow by installing a backflow prevention device on your hose bib. The device provides a physical barrier to backflow.

## Common Residential Cross-Connections

- ▶ Hose bibs
- ▶ Garden hoses
- ▶ Boilers
- ▶ Private wells
- ▶ Swimming pools
- ▶ Lawn irrigation systems
- ▶ Residential fire protection systems

## 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.

Use a hose to unplug blocked toilets or sewer pipes.

### Do!

Keep the ends of hoses off the ground and clear of all possible contaminants.

Install "vacuum breakers" on all hose bibs 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 us if you see any suspicious or unauthorized use of a fire hydrant.

*For more information about residential backflow and cross-connection protection, contact the Three Rivers Water Department at 413-283-9284.*

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