

# A Consumer's Guide to Backflow Prevention in Texas

The Texas Commission on Environmental Quality requires all public water systems to maintain a cross-connection control program that protects the distribution system delivering drinking water to your home or business.

A cross-connection control program includes:

- An inspection of the customer's private plumbing to identify and prevent cross-connections and potential contamination, including contamination from high lead levels in the plumbing.
- Installation and testing of backflow-prevention assemblies, where required.
- Rules to prevent cross-connections and unacceptable plumbing practices—ordinances, regulations, service agreements, and a plumbing code.

Some public water systems may have more stringent requirements than the TCEQ. TCEQ regulations are the minimum requirement.

## What is a cross-connection?

A physical connection between potable water and an actual or potential contamination hazard that could make the water unsafe to drink. Wherever there is a cross-connection, there is a potential threat to public health from contaminants.

## What is backflow?

Water flowing in the opposite of its intended direction, either from a loss of pressure in the supply lines or an increase in pressure on the customer's side. When the water backflows it can carry contaminants with it into the water lines.

## Common cross-connections:

- ◆ *Garden hose:* Backflow can occur at your home if you leave a garden hose turned on and submerged in a swimming pool, insert it into your car's radiator to flush out the antifreeze, or attach it to an insecticide sprayer. That material could siphon back into your potable water.
- ◆ *Private well:* Backflow can also occur from an untreated water supply, such as a private well, if the well plumbing is connected to the potable-water-supply plumbing. The untreated water could be pumped into the potable-water supply serving your home and into the public water system.
- ◆ *Lawn sprinkler system:* TCEQ regulations require that all lawn sprinkler systems be connected through a backflow-prevention assembly—without which, the stagnant water, and anything in it, from the sprinkler system could be drawn into the potable-water supply for your home.

## How can backflow be prevented?

Backflow into a potable-water system can be prevented by using a backflow-prevention assembly, or an air gap, which is a physical separation between the water supply and a potential source of pollution. Licensed professionals as well as your public water system are responsible for determining the type of backflow-prevention assembly required, based on the degree of hazard.

## Testing backflow-prevention assemblies

Because backflow-prevention assemblies are mechanical assemblies that can fail, the TCEQ requires testing of all backflow-prevention assemblies at installation by a TCEQ-licensed tester. Backflow-prevention assemblies installed to protect against any health hazard must be tested annually.

## How can I find out more information about backflow?

For more information about backflow and cross-connection control, visit <[www.tceq.texas.gov/goto/cc](http://www.tceq.texas.gov/goto/cc)>.

[www.tceq.texas.gov/publications/gi/gi-411.html](http://www.tceq.texas.gov/publications/gi/gi-411.html)



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