#### Responsibilities

Warren County Water and Sewer
Department is responsible for protecting the
public water supply, which begins at the
source, includes the entire water distribution
system and service connections, and ends at the
point of delivery to the customer (the water
meter). WCWS requires backflow prevention
devices for containment of pollution sources.

Warren County Health Department is responsible for regulating the protection of the consumer's water system, which begins at the point of delivery from the supplier and includes all piping installations inside the consumer's premises. Backflow devices required are for isolation of pollution sources within the building.

Customers are responsible for providing backflow prevention devices and having them inspected, tested, and repaired.

Tests are required at the time of installation and at least every twelve (12) months thereafter. Inspections, tests, and repairs of backflow devices are at the expense of the water customer, and must be performed by a certified plumber.

Failure to install, maintain, and complete annual testing of required backflow prevention devices may result in your water service being disconnected.

#### Warren County Backflow Program

WCWS requires approved backflow prevention devices on industrial, commercial, and multifamily residential water lines. As a courtesy, WCWS mails reminders and forms to customers to help them complete the required annual testing.

A \$25.00 administrative fee is charged for each test report returned by the due date.

For more information about containment backflow prevention devices, contact:

Warren County Water and Sewer Department

(513) 695-1377



Warren County Water and Sewer Department

406 Justice Drive Lebanon, Ohio 45036 www.co.warren.oh.us/water (513) 695-1377

### **Warren County**

# Cross Connections and Backflow Prevention Program





#### What is Backflow?

Backflow is any reversal of flow within a piping system. Warren County Water and Sewer Department (WCWS) is responsible for maintaining the quality of water until it enters a customer's piping system. After the water enters a customer's premises, WCWS cannot control its quality or use. Allowing water to reverse flow from a customer's piping into the distribution system could endanger the public water supply.

#### What is a Cross Connection?

A cross-connection is any temporary or permanent connection between potable water and any other substance. A temporary cross connection could be a hose connected to a faucet, with its other end submerged in the contents of a utility sink, swimming pool, car radiator, or industrial cooling system. It could be a garden hose connected to an insecticide dispenser. Cross-connections can defeat your plumbing system's built-in backflow prevention principles, allowing harmful substances to backflow into your water pipes.

#### What causes backflow?

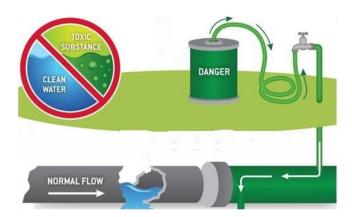
Backflow can be caused by two different forces, backsiphonage and back pressure.

**Backsiphonage** occurs when there is a sudden reduction in water pressure within the distribution system. This can occur when a water main breaks or when a car strikes a fire hydrant. The sudden pressure drop creates suction that can siphon water from your pipes, and anything connected to them, back into the distribution system.

**Backpressure** can cause backflow when the water pressure inside a boiler or other equipment connected to a consumer's piping system becomes higher than the pressure in the distribution system.

#### What are common backflow hazards?

- Hose connections to chemical solution aspirators (herbicides, pesticides and fertilizers).
- Law irrigation systems
- Chemically treated heating systems
- Hose connections to a water outlet or laundry tub.
- Swimming pools, hot tubs, spas.
- Private and/or non-potable water supplies located on the property.
- Water-operated sump drain devices



#### How can backflow be prevented?

We can prevent backflow by eliminating crossconnections and using backflow prevention devices.

Household devices are available for use with hoses. Industrial, commercial, and multi-family applications require devices such as a reduced pressure double check valve.



## Where are backflow preventers required?

- Lawn Irrigation Systems
- Fire Protection services to buildings with sprinklers
- Customers with wells and/or cisterns
- -Commercial, Retail, and Industrial customer water services
- Agricultural Operations
- Water powered sump pumps
- Hospitals, mortuaries, clinics, nursing homes
- Car washes.

## What additional steps can customers take to prevent backflow?

- Never submerge hoses in buckets, pools, spas, tubs or sinks.
- Always keep the end of the hose away from possible contaminants.
- Do not use any spray or cleaning attachments on your hose without a backflow prevention device on the hose.
- Install approved, testable backflow preventers on lawn irrigation systems and register it with the water department
- Do not create a connection between any well or cistern and the water supply plumbing.
- Install backflow preventer on your water powered sump pump and register it with the water department.

