

## WHAT ARE PLUMBING CROSS CONNECTIONS?

A cross connection is defined as an actual or potential connection between a public water supply and a source of possible contamination or pollution. All homes have potential cross connections.

The water pipes and plumbing fixtures that make up cross connections can be the link for contamination to get into the drinking water supply. This can be a serious health hazard within your home and can be harmful to the public water supply if a backflow condition occurs. Backflow happens when the flow of water into your home is reversed by a sudden drop in pressure or a pump causing backpressure.

The result of cross connection contamination is that chemicals, poisons and bacteria might find their way into the water you drink.

Help yourself, your family and your community by eliminating unprotected cross connections.

## WHAT GOES WRONG?

Water pressure can suddenly drop because of heavy usage, a fire in the area or a broken water main. When that happens, contaminated water could be siphoned back into your plumbing system from unprotected cross connections within your home. Even though the Swancreek Water District has a reliable water distribution system, these pressure drops do occur sometimes in the system.

The Ohio EPA requires public water systems in Ohio to educate customers to identify backflow hazards and plumbing cross connections that may exist in their homes. Water customers should report any of the cross connections listed in this brochure to the Swancreek Water District.

## BE WATER-WISE ABOUT PLUMBING CROSS CONNECTIONS

The Swancreek Water District delivers safe, high quality water to your home. The goal is to keep it that way. That's why the Swancreek Water District has adopted a Cross Connection Control Program. It's goal is to protect the public health -- yours and that of families throughout the service area. That is also why the Ohio EPA requires each water system to have a program. In addition, Swancreek Water District water tap inspectors check all new taps construction for proper protection.



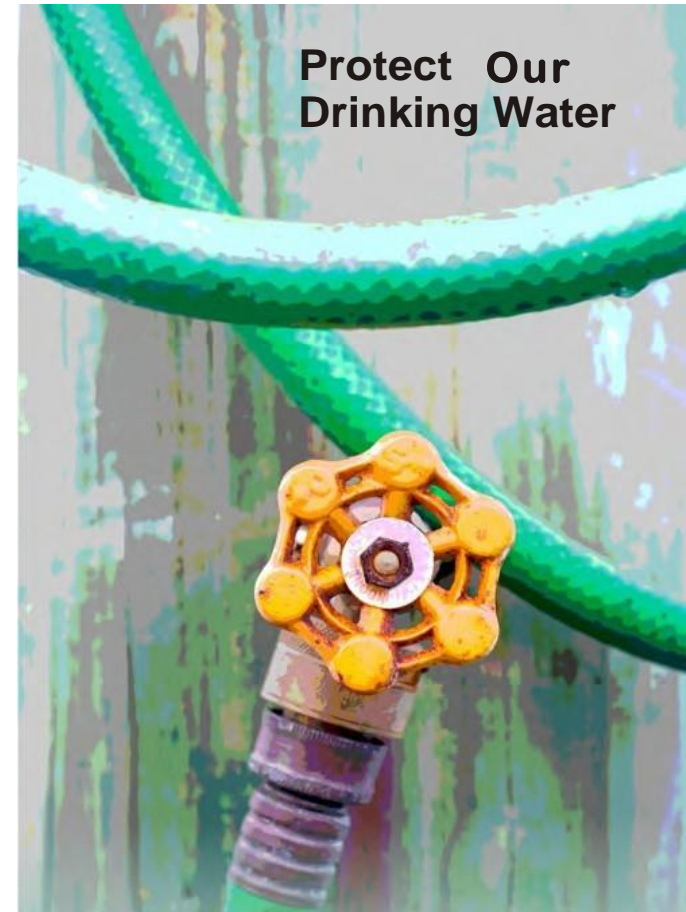
## HELP IS AVAILABLE

Our office can tell you what type of backflow prevention devices you may need. If a cross connection does exist, customers need to indicate if there is a backflow preventer in use. Help is as close as your telephone.

**Call 419-822-3656 during regular business hours:**

<b>Monday</b>	<b>Closed</b>
<b>Tuesday</b>	<b>9:00 AM – 2:00 PM</b>
<b>Wednesday</b>	<b>9:00 AM – 2:00 PM</b>
<b>Thursday</b>	<b>12:00 PM – 5:00 PM</b>
<b>Friday</b>	<b>9:00 AM – 12:00 PM</b>

## Protect Our Drinking Water



## HOW TO DETERMINE IF YOU HAVE A PLUMBING CROSS CONNECTION ISSUE

This brochure is provided to all Swancreek Water District residential customers to provide information and awareness on the hazards of cross connections and how customers can safeguard the quality of water within their home and the public water supply by using proper backflow protection when necessary.



# RESIDENTIAL CROSS CONNECTION TYPES

## **1. PRIVATE WELLS AND SECONDARY WATER SOURCES**

A well or secondary source of water on a property is a potential cross connection. Wells or secondary water sources are prohibited from being connected to the Swancreek Water District. A backflow preventer on the public water supply is always required when secondary sources of water are present on a customer's property.

## **2. LAWN IRRIGATION SYSTEMS**

Underground irrigation systems are a direct cross connection, and the public water supply must be protected with a suitable backflow device. These devices are normally located on the side or back of your home similar to the one pictured. Surface water can be siphoned back into your plumbing system through an automated lawn irrigation system unless a proper backflow device is attached. If the system uses a pump or has fertilizer or chemical injection, additional backflow protection and backflow testing is required.

## **3. SWIMMING POOLS OR HOT TUBS**

Pools and hot tubs that are permanently connected to the home plumbing system are direct cross connections and must be protected with a suitable backflow device. An unprotected cross connection could draw pool water and chemicals back into your household plumbing system and public water supply. When filling a pool or hot tub with a hose, never submerge the end as this is another cross connection. Always leave an air gap when filling pools, tubs, sinks or containers.

## **4. CHEMICAL, BIOLOGICAL, VETERINARIAN OR OTHER LAB FACILITIES**

Home use of process chemicals, biological laboratory supplies, veterinarian supplies or other laboratory chemicals can cause contamination due to an unprotected cross connection. A suitable backflow device is necessary to protect the home plumbing system and public water supply.

## **5. BOILER SYSTEMS FOR HEATING**

These systems are not common but do exist in some homes. Normally these systems are in larger homes. Water is used to replenish the boiler which also may have chemicals. This cross connection must be protected with a suitable backflow device to prevent contamination of the home plumbing system and public water supply.

## **6. HOME MEDICAL, DENTAL OR DIALYSIS EQUIPMENT**

Similar to equipment found in medical offices, these devices are sometimes used in the home. When connected to the water supply, these cross connections must be protected with a suitable backflow device to prevent contamination of the home plumbing system and public water supply.

## **7. OTHER POTENTIAL CROSS CONNECTIONS**

A garden hose submerged in a sink or connected to a container containing chemicals or fertilizer is a serious cross connection. A sudden drop in water pressure from a water main break or from water being used to fight a fire can siphon water back into your home plumbing system or the public water supply. A vacuum breaker is a simple inexpensive device that can be installed on the faucet or hose to prevent contamination. Vacuum breakers are typically provided on outside faucets.

Most bathtubs and sinks have an air gap. This space between the highest water level in the fixture and the outlet of the water is the best form of backflow protection. Never leave the end of a hose submerged in a tub, pool or container.

Residential fire protection systems, in-home water treatment systems, car washes, solar heating and decorative ponds and soaking tubs are other possible cross connections.