

# Cross Connection Control For Your Home

## WHAT IS CROSS CONNECTION?

A cross connection is an actual or potential connection between the safe drinking water (potable) supply and source of contamination or pollution. State plumbing codes require approved back-flow prevention devices, assemblies, or the methods to be installed at every point of potable water connection and use. All cross connections must be properly protected or eliminated.

## HOW DOES CROSS CONNECTION OCCUR?

When you turn on a faucet, you expect the water to be as safe as when it left the treatment plant. However, certain hydraulic conditions left unprotected within your plumbing system may allow hazardous substances to enter and contaminate your own drinking water or even the public water supply. Water normally flows in one direction to your faucet. However, under certain conditions, water can actually flow backwards; this is known as backflow (back siphonage and back pressure). There are two situations that can cause backflow.

### **Back Siphonage:**

May occur due to a loss of pressure in the municipal water supply such as from a water main break. This creates a siphon in your plumbing system which can draw water out of a sink or bucket and back into your water or the public water system.

### **Back Pressure:**

May occur when a source (such as a boiler) creates a greater pressure than the incoming water pressure. This may cause contaminated water to be pushed into your plumbing system through an unprotected cross-connection.

### **In the Bathroom—Handheld Shower**

The handheld shower fixture is compliant if:

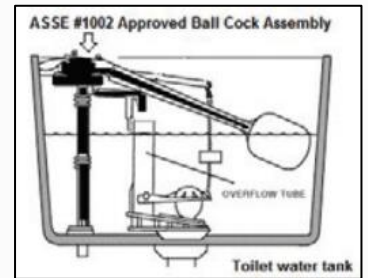
- When the shower hose head is hanging freely, it is at least 1 inch above the top of the flood level rim of the receptor (tub).
- Complies with ASSE #1014
- Has the ASME code 112.18.1 stamped on the handle.



### **In the Bathroom—Toilet Tanks**

There are many unapproved toilet tank fill valve products sold at common retailers which do not meet the state plumbing code requirements for backflow prevention.

- Look for the ASSE #1002 Standard symbol on device and packaging.
- Replace any unapproved devices with an ASSE #1002 approved anti siphon ball-cock assembly. Average cost for this do-it-yourself-type device available at home improvement stores is typically \$12 to \$22.
- Verify overflow tube is one inch below critical level (CL) marking on device.

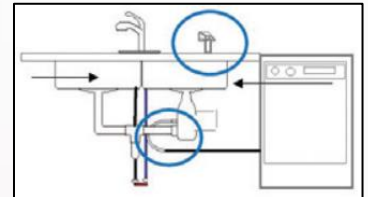


### **In the Kitchen**

A sink sprayer hose and dishwasher hose may be places for potential backflow hazard if not properly isolated with backflow prevention devices or methods.

### **DO...**

- Keep ends of hoses clear of all possible contaminants.
- Make sure dishwashers are installed with the proper "air gap" device.
- Verify hose bibb vacuum breaker is installed on all threaded faucets around your home.
- Make sure water treatment devices like water softeners have the proper "air gap", which is a minimum of one inch above the drain.



### **DON'T...**

- Submerge hoses in anything including buckets, pools, tubs, sinks, ponds or automobile radiators.
- Use spray attachments without an approved backflow prevention device.
- Connect drain pipes from water softeners or other treatment systems directly to the sewer drain.

Always be sure there is a one inch "air gap" separation.



## **SAFE WATER IS OUR GOAL**

If connections to your plumbing system are not properly protected there is a chance your water can become contaminated. The purpose of the local Cross Connection Control Program, as required by State Plumbing Code and Regulations, is to ensure everyone in the community has safe, clean drinking water.

## **QUESTIONS? MORE INFORMATION?**

Contact one of the organizations below to learn more about cross connection control and backflow prevention.

- WI Dept. of Natural Resources [www.dnr.wi.gov](http://www.dnr.wi.gov)
- WI Cross Connection Control Resources [www.hydrocorpinc.com/resources/links](http://www.hydrocorpinc.com/resources/links)
- WI Dept. Safety & Professional Services [www.dsps.wi.gov](http://www.dsps.wi.gov)
- Environmental Protection Agency [www.epa.gov](http://www.epa.gov)

715-528-3330 or 715-696-3330  
[www.florenceutilitieswi.com](http://www.florenceutilitieswi.com)  
501 Spring Avenue, Florence, WI