



Residential Water User **CROSS-CONNECTION HAZARDS** Bathrooms & Kitchens

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. Your water can become contaminated if connections to your plumbing system are not properly connected.

To avoid contamination, backflow preventers are required by state plumbing codes wherever there is an actual or potential hazard for cross contamination. The Wisconsin Department of Natural Resources requires all public water suppliers to maintain an ongoing cross connection control program involving public education, onsite inspection and possible corrective actions by building owners, if required.

What is a Cross-Connection?

A cross-connection is a direct or indirect arrangement of drinking water piping that is or can be connected to any water, liquid, or gas not intended for human consumption. State plumbing codes require approved backflow prevention devices, assemblies or methods to be installed at every point of water connection and use.

How Can Contamination Occur?

Water normally flows in one direction, from the municipal water system through the customer's cold or hot water plumbing, to a plumbing connection. Under certain conditions, water can flow in the reverse direction. This is known as backflow. Backflow is when the water in your pipes (the pipes after the water meter) travels backward. There are two situations that can cause the water to flow backward or backflow: backsiphonage or back pressure.

What is Backsiphonage?

Backsiphonage may occur due to a loss of pressure in the municipal water system during a fire emergency, a water main break or a system repair. This creates a siphon in the plumbing system which can draw water out of a sink or bucket through a submerged hose.

What is Back Pressure?

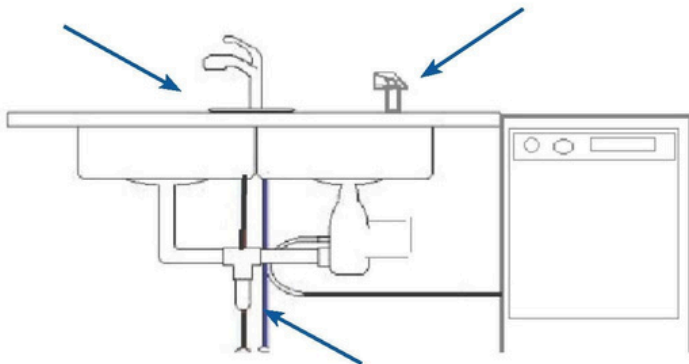
Back pressure may be created when a source of pressure, such as a boiler, creates a water pressure greater than the pressure supplied from the municipal water system. This may cause potentially contaminated water to be pushed into your plumbing system and the Village water supply through an unprotected cross connection.

How to Protect YOUR Drinking Water

Do!

- Keep the ends of hoses clear of all possible contaminants.
- Ensure dishwashers are installed with the proper air gap.
- Install Hose Bibb Vacuum Breakers on all threaded faucets around your home.
- Ensure any water treatment system drain lines, such as from water softeners, have the proper air gap of a minimum 1 inch above the top of any drain or sink rim.

In the Kitchen

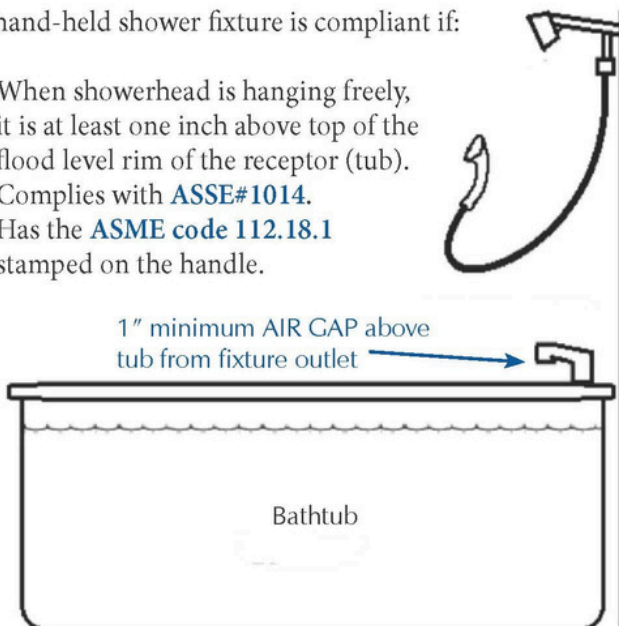


Hoses and water treatment devices may create a potential backflow hazard if not properly isolated with backflow prevention methods.

In the Bathroom—Hand-held Shower Fixture

The hand-held shower fixture is compliant if:

- When showerhead is hanging freely, it is at least one inch above 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.

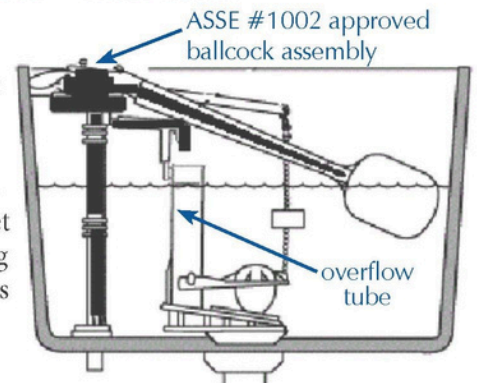


Don't!

- Submerge kitchen sink, laundry tub, or shower hoses in buckets, pools, tubs or sinks.
- Use spray attachments without a backflow prevention device.
- Connect waste pipes from water softeners or other treatment systems directly to the sewer or submerged drain pipe. Always be sure there is a one-inch "air gap" separation.

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 the device and packaging.
- Replace any unapproved devices with an ASSE #1002 approved anti-siphon ballcock assembly. Average cost is typically \$12 to \$22 at home improvement stores.
- Verify overflow tube is one inch below critical level (CL) marking on the device.

For More Information

- WI Department of Safety and Professional Services: www.dsps.wi.gov
- WI Department of Natural Resources: www.dnr.wi.gov
- Environmental Protection Agency (EPA): www.epa.gov
- Cross-Connection Control / Backflow Prevention: www.hydrodesignsinc.com/wicc.html