

Help Protect Your Drinking Water from Contamination



How Contamination Occurs

Water normally flows in one direction from the public water system through the customer's cold or hot water plumbing to a sink tap or other plumbing fixture. The plumbing fixture is the end of the potable water system and the start of the waste disposal system.

Under certain conditions, water can flow in the reverse direction. This is known as BACKFLOW. **Backflow** occurs when a backsiphonage or back-pressure condition is created in a water line.

Backsiphonage may occur due to a loss of pressure in the water distribution system during high withdrawal of water for fire protection, a water main or plumbing system break, or a shutdown of a water main or plumbing system for repair. A reduction of pressure below atmospheric pressure creates a vacuum in the piping. If a hose bib was open and the hose was submerged in a wading pool during these conditions, the non-potable water in the pool would be siphoned into the house's plumbing and back into the public water system.

Backpressure may be created when a source of pressure, such as a pump, creates a pressure greater than that supplied from the distribution system. If a pump supplied from a not-potable source, such as a landscape pond, were accidentally connected to the plumbing system, the non-potable water could be pumped into the potable water supply.

How to Prevent Contamination of Your Drinking Water

Protect your drinking water by taking the following precautions:

Don't:

- Submerge hoses in buckets, pools, tubs, sinks, ponds, etc.
- Use spray attachments without a back-flow prevention device.
- Use a hose to unplug blocked toilets, sewer, etc.

Do:

- ⇒ Keep the ends of hose clear of all possible contaminants
- ⇒ If not already equipped with an integral (built-in) vacuum breaker (Picture), purchase and install hose bib type vacuum breakers on all threaded faucets around your home. These devices are inexpensive and are available at hardware stores and home improvement centers.
- ⇒ Install an approved backflow prevention assembly on all underground lawn irrigation systems. Remember, a plumbing permit is required for the connection of an underground lawn irrigation system to your plumbing system.

Hose Connection Vacuum Breaker

Hose connection vacuum breakers are specially made for portable hose attached to hose thread faucet outlet. Their purpose is to prevent the flow of contaminated water back into the drinking water. These devices screw directly to the faucet outlet. They can be used on a wide variety of installations.



Milford City code prohibits booster pumps to be connected to the city water system in private homes and/or business to prevent backpressure and contamination of the system.

Recognizing Cross-Connections

All homes and facilities have potential cross-connections. Common cross-connections include:

- Garden hose left in bucket of soapy water or cleaning chemicals, weed sprayers.
- Landscape irrigation systems; water accumulating by sprinkler heads and loss of water pressure causing that water to be sucked back through the plumbing carrying fertilizer, pesticides, animal waste, or other bacteria.
- Swimming Pools and Hot Tubs
- Fire Protection Systems
- Businesses using chemicals
- Medical Equipment
- Wash Basins and Service Sinks
- Boilers

It is impossible to cover all of the information pertaining to cross connections in a pamphlet. If you would like further information, please visit our website at www.milfordcityutah.com and select the "Ordinances" quick link to view our city ordinance Chapter 10.04 pertaining to Control of Back-flow and Cross Connection.