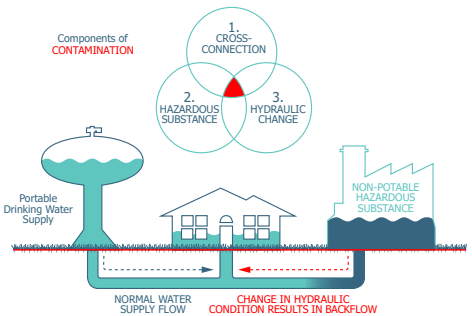
Your local water provider is making improvements to protect the safety of drinking water. Here's why.

MN Water Supply Rule 4720.0025, and the current MN Plumbing Code require approved cross-connection control measures at every point of potable water connection and use.

PREVENTING THE HAZARDS OF BACKFLOW

Minnesota water providers are responsible for ensuring that water is safe for everyone to drink. However, certain conditions known as cross-connections may allow hazardous substances to contaminate your own – or the public's – water supply. A cross-connection is an actual or potential connection between the safe drinking water (potable) supply, and a source of contamination or pollution. Cross-connections can result in a hazardous event known as backflow, which can draw those contaminants into your drinking water supply.



Remember, we're all in this together – and together we can work to keep your drinking water safe from the hazards of backflow.

For more information, contact your local water utility, or visit hydrocorpinc.com/mn

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RESOURCES:

State of Minnesota, Department of Health (MDH)
www.health.state.mn.us/communities/environment/water/com/crossconn.html

Minnesota Department of Labor & Industry, Plumbing
www.dli.mn.gov/workers/plumbers

Environmental Protection Agency (EPA)
www.epa.gov/ground-water-and-drinking-water

American Water Works Association (AWWA)
www.awwa.org/

Minnesota Rural Water Association
www.mrwa.com/crossconnection.html

USC-Foundation for Cross Connection Control
www.fccchr.usc.edu//introduction.html

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MINNESOTA

KEEPING MINNESOTA'S DRINKING WATER SAFE

How does this program affect me?

As a business owner or manager, your cooperation is important to make this program work. By providing easy and courteous access to your facility, your water utility or authorized agent can evaluate and protect your drinking water safety. They will identify unprotected cross-connections, and verify that the correct backflow prevention measure is properly installed at each service connection. Many inspections take as little as 20-30 minutes; more complex sites take longer. The “hazard” level associated with each connection determines the type of backflow prevention method.

WHAT DOES “DEGREE OF HAZARD” MEAN?

This determines whether, and to what extent, a substance is a toxic contaminant (High or Health Hazard) or a nontoxic pollutant that generally presents an aesthetic (Low or Non-Health) hazard. Both types of substances can make drinking water nonpotable. Evaluating the degree of hazard helps determine the most appropriate type of backflow prevention.

BACKFLOW PREVENTION METHODS

Once the degree of hazard has been determined, the proper backflow preventer can be installed. Plumbing specialists working with local municipal officials will determine which measure is best suited for each application. Five basic methods are used:

- Air Gap
- Atmospheric vacuum breakers, including hose connection vacuum breakers
- Pressure-type vacuum breaker assembly (PVB)
- Double check-valve assembly (DCVA)
- Reduced-pressure principle backflow preventer assembly (RP or RPZ)

Many cross connections can be corrected with a simple hose bibb (faucet) vacuum breaker. This means equipping each hose connection, both outside and inside, with a simple, inexpensive vacuum breaker (left).

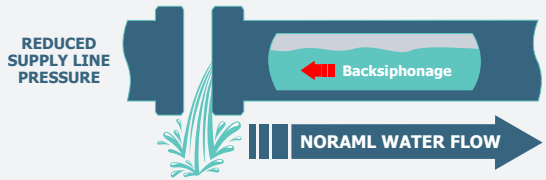
COMMON CROSS-CONNECTION SITES

- Hose bibbs
- Boilers
- Cleaning/Mop Stations
- Lawn Irrigation Systems
- Fire Protection Systems
- Lab & Medical Equipment
- Restaurant Equipment
- Power Washers/ Sprayers
- Water Softener Drains

WHAT IS BACKFLOW?

Water normally flows in one direction. Under certain conditions, water can actually flow backwards; this is known as backflow. There are two conditions that can cause water to flow backward: backsiphonage and backpressure.

Backsiphonage – this may occur due to a loss of pressure in the public water system from a water main break, fire fighting emergency, or system repair. This loss of pressure creates a siphon effect that can pull contaminants into the drinking water.



Backpressure – may be created when a source of pressure in your plumbing system (such as a boiler or pump) creates a pressure greater than the water pressure of the public water system. This may cause contaminated water to be pushed into your plumbing system through an unprotected cross-connection.