

Help Keep Our Water Safe

The City of Kearney Utilities Department, as part of the requirements of the State of Nebraska Department of Health, is publishing this information as part of our Public Education Program on Backflow Prevention.

The Nebraska Department of Health requires water systems to implement an on-going cross connection control program. An important part of this program is public education. It is believed that a well-informed public will be more aware of the possibility of cross connections within their property and will take reasonable precautions to avoid creating cross connections on their property. This brochure is intended to explain what a cross connection is, what causes it, what some of the consequences can be, and how it can be prevented.

What is a Cross Connection?

A plumbing cross connection is defined as the actual or potential connection between a public water supply and a source of contamination or pollution.

In other words, a cross connection is the link through which it is possible for a contaminating material to enter the drinking water supply system. Such links or possible links, may pose a serious public health hazard. Because of the hazards of cross connections, you and every other customer of the public water supply system have a responsibility to help safeguard your system and the public water supply system from cross connections.

How does contamination occur?

When a cross connection exists, it is possible for a contaminant to enter the drinking water system when the pressure of the polluted source exceeds the pressure of the potable source. This may result in either a backsiphonage or backflow. Basically, either is a reversal in the normal direction of the water flow. Such situations can be produced through a variety of circumstances within plumbing systems and are generally caused by a drop in water pressure.

EXAMPLES OF RESIDENTIAL CONTAMINATION

Occasional water pressure disorders can occur in the public water supply distribution system or within your own residence. These disorders can be caused by a sudden loss of pressure such as when a construction contractor breaks a service line or water main. Because of reduced pressure, the flow of the water in the system may be reversed. As a result, contaminants may flow backwards or be sucked into your plumbing system and the public water system through unprotected hoses or other possible cross connections. Approved cross connection control devices are available which will prevent backflow or backsiphonage.

ALL new homes and businesses built since 1990 have backflow protection devices in place as part of the new construction plumbing inspection. However, it is required that these locations be checked on a periodic basis to insure that a previous occupant did not make changes to the plumbing that may require backflow protection.

ALSO, some water customers may have private wells. If an old well remains in operation, with valves to allow its use in the customer's water supply system, the potential exists for that well to pump well water into the public water distribution system. The private well must be completely and permanently disconnected from the home plumbing system and the public water supply system.

HOW TO PREVENT CROSS CONNECTIONS AND BACKFLOW

1. **Check your faucets** to be sure that all faucet endpoints are above the flood level of the sink, tub, basin, or other apparatus they supply.
2. **Protect faucet extensions** by installing proper backflow prevention devices (i.e. hose bib vacuum breakers) on all faucets capable of having a hose or other extension attached.
3. **Check drain lines** (refrigerator drink dispensers, water softeners, heat exchangers, etc.) to be sure there is an adequate air gap between the drain line and the floor drain or sewer line into which they discharge.
4. **Never use unprotected faucets** to fill non-drinking water containers (i.e. water beds, wading pools, stock tanks, hot tubs, etc.)

For more information, please don't hesitate to contact the City of Kearney Water Quality/Utility Coordinator at (308)233-3258.

Check out our website at:
www.cityofkearney.org