# How to Prevent Contamination of Your Drinking Water

Protect your drinking water by taking the following precautions.

#### Do:

- Keep the ends of hoses clear of all possible contaminants.
- If not already equipped with an integral (built-in) vacuum breaker, buy and install hose connection vacuum breakers on all threaded faucets around your home. These devices are inexpensive and are available at hardware stores and home improvement centres.
- Install an approved backflow prevention assembly on all underground lawn irrigation systems. Please contact your irrigation specialist to ensure a backflow prevention device is in place.

#### Don't:

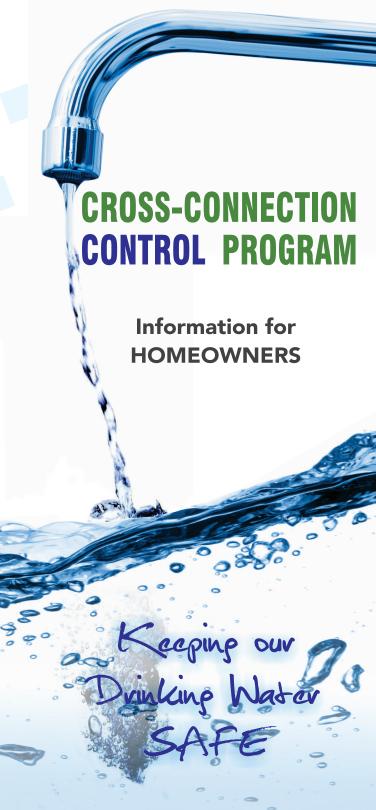
- Submerge hoses in buckets, pools, tubs, sinks, ponds, etc.
- Use spray attachments without a backflow prevention device.
- Connect waste pipes from water softeners or other treatment systems to the sewer, submerged drain pipes, etc.
- Use a hose to unplug blocked toilets, sewers, etc.

# The Cross-Connection Control Program

Township of King delivers safe and high quality drinking water to homes and businesses. The Cross-Connection Control Program safeguards the municipal drinking water distribution system and helps prevent contamination in the drinking water system.

This program is mandated by the Cross Connection Control and Backflov Prevention Program.





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#### What is a cross connection?

A Cross-Connection is any actual or potential connection between the municipal drinking water system and any source of pollution or contamination. For example a hose submerged in a sink or container full of dirty water or chemicals, under the right circumstances could draw the water from the sink or container back in the municipal drinking water system. Cross-Contamination Control, or Backflow Prevention, helps to ensure our drinking water is protected from external contamination of the drinking water supply system.

#### **How Contamination Occurs**

Water normally flows in one direction, from the public drinking water system through a home's cold or hot water plumbing to a sink tap or other plumbing fixture.

Under certain conditions, water can flow in the opposite direction. This is known as backflow. Backflow occurs when back siphonage or back pressure condition is created in a water line.

Back siphonage is when water flows in the opposite direction caused by a negative pressure in the water line. This can happen in any building, facility or residential home where there is a reduction or stoppage of the main water supply pressure because of nearby fire fighting, repairs or breaks in watermains.

Back pressure can be created when a source of pressure, such as a pump, creates a pressure greater than the one supplied from the water distribution system. For example, if a pump supplied from a landscape pond was accidentally connected to the plumbing system of a residents' drinking water, the water from the pond could be pumped into the drinking water supply.

# Protection of the Water Distribution System

In general, residential homes are considered a low hazard and therefore, may not require the installation of a backflow prevention device at the water meter.

A home or business in King Township may require (as a condition of water service) the installation of a backflow prevention device to provide additional protection for the public drinking water system.

The backflow prevention devices used for low hazard locations (most residential homes) are typically Hose Connection Vacuum Breakers and Dual Check Valves.

A backflow prevention assembly will be required where a single-family residence has special conditions that increases the hazard from low to medium or high/severe. Examples of special conditions are a home photo processing lab, a well, a home hair salon, a mechanic or any direct connections to chemicals or other auxiliary water sources.

### Typical Residential Backflow Prevention Devices

The Cross Connection Control Program is geared to Industrial, Commercial and Institutional properties that pose a potential hazard of contaminating the public drinking water system.

Here are some devices for the low hazards that would be typically found in homes.

#### **Low Hazard Devices**

