

# Backflow Prevention Program

Protect Our Drinking Water



## Backflow Prevention Definitions You Need To Know

#### **Backflow**

The reversal of the normal direction of the flow of water. Backflow can occur as a result of either backsiphonage or backpressure.

#### **Backsiphonage**

Backflow resulting from negative pressure in a water line. Backsiphonage can occur due to the reduction in the pressure of a watermain resulting from fire hydrant use or a nearby watermain break.

#### **Backpressure**

Backflow resulting from downstream pressure that is greater than the supply pressure. Some water service installations with pumps or elevated tanks may create a higher pressure in the service line than what is being supplied by the watermain on the street.

#### **Backflow Prevention Device**

A device that is installed on a water service to prevent backflow. There are numerous types of backflow prevention devices that can be utilized depending upon the severity of the possible contamination.

#### **Cross-Connection**

Any actual or potential connection between a potable (drinking) water supply and a non-potable source.

## The Blackflow Prevention Program

Backflow prevention ensures that the potable water flowing throughout the City's watermain distribution system is protected against possible contamination.

### The City's Backflow Prevention Program consists of the following components:

- Industrial, institutial, commercial and large multi-level residential facilities will be required, at their expense, to have a cross-connection survey performed at their facility by a licensed plumber or backflow prevention spectialist.
- Based on these findings, the property owner will be required to hire a licensed plumber to have the recommended backflow devices installed. A plumbing permit is required prior to the installation of new devices.
- The devices are required to be tested upon installation and yearly thereafter by a licensed tester and device test reports must be provided to the City.
- Cross-connection surveys must then be completed every five years to ensure the facility continues to have the required backflow prevention in place.

stcatharines.ca/Backflow

## How Does This Affect Me?

Under the provisions of the City's Water By-law (2005-200), it is the responsibility of the property owner to arrange for the installation and regular testing of any required backflow prevention devices at their own expense.

Industrial, institutional, commercial and large multi-level residential facilities are considered backflow risks and will be required to install preventative devices for premise and source isolation where appropriate.

Premise isolation is the installation of a backflow prevention device at or near the water meter, prior to any other connection to the water service for the premises. This protects the City water distribution system from possible backflow contamination. Source isolation is the installation of a backflow prevention device at specific points within a facility to isolate a cross connection from the internal water distribution system.

Further details on the program, the required forms and a list of certified backflow prevention specialists are available on our website at:

stcatharines.ca/Backflow

For questions or concerns please call **905.688.5600** or email **backflow@stcatharines.ca** 

### Help Protect our Drinking Water

The City of St. Catharines distributes safe and reliable drinking water to its residents and businesses. However, contaminants can enter the drinking water distribution system at any service connection. To ensure that the water supply remains safe and clean, the City has an established Backflow Prevention Program that aims to:

- Enhance the Cross-Connection and Backflow Prevention provisions of the City of St. Catharines Water By-law (2005-200);
- Identify cross-connections throughout the City's water distribution system where possible contamination may result;
- Maintain a database of water users who have backflow prevention devices to ensure that regular testing and maintenance is undertaken as required; and
- Maintain a database of certified backflow device testers.

### **Municipal Works**

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