Keep Your Drinking Water Safe

Frequently Asked Questions
Residential

Making a difference...together

Cross Connection Control Program

What is a cross connection?

A cross connection is any actual or potential connection between a drinking water system and any source of contaminated water. These are the types of cross connection hazards you may find in your home:

- Garden hose connections
- Lawn irrigation systems
- Fire sprinkler systems
- Boiler heating systems
- Solar heating systems
- Swimming pools
- Home-based businesses (e.g., auto repair, hair salons)
- Reclaimed or auxiliary water from wells

What is backflow?

Backflow is a reversal of the normal direction of flow caused by back siphoning and back pressure.

Back siphoning occurs when the normal water pressure drops in the supply system. For example, when water pressure drops because of a water line break or shutdown, the water lines acts like a straw, sucking back in to the system.

Back pressure occurs in heating and pump systems when the water pressure downstream of the supply is higher and pushes back. Heating systems create pressure because hot water expands and pump systems create pressure to move water to higher elevations or for uses that require more pressure.

What do backflow devices do?

Backflow devices are an important tool for reducing the risk of contamination of the public drinking water system during a backflow or back pressure incident. They require installation and annual maintenance by qualified professionals.

What is the cross connection control program?

In 2006, the Island Health Authority, under the *Drinking Water Protection Act*, mandated the CRD to design, implement and maintain a cross connection control program for any connections that could put the Greater Victoria drinking water supply at risk.

The CRD enacted Bylaw No. 3516, which allows staff to inspect and enforce cross connection control requirements in the BC Building Code and CSA Group standards. The program has become an integral part of the CRD multi-barrier approach to protecting our region's drinking water.

What is my role?

As a homeowner, you are required to:

- ☐ Make sure your plumbing connections meet CSA Group standards
- ☐ Install appropriate backflow preventers
- ☐ Test and register backflow assemblies according to CRD Bylaw No 3516

What are the installation and maintenance requirements?

- Permits are required for all installations
- Only certified plumbers should install backflow devices
- Test single-family home irrigation systems without chemicals every three years
- Test all other backflow assemblies annually

Use the portal to assign testing and view the status of your devices.

Why is testing required?

Backflow assemblies are mechanical devices and are subject to failure from wear and tear, corrosion, freezing, water conditions and misuse. Annual testing ensures that the assemblies are operating as designed to prevent backflow of contaminated or polluted water into the drinking water system.

How much does it cost?

Residents should contact a licensed plumber or backflow tester to obtain pricing for testing their residential backflow assemblies.

The cost of testing can vary between contractors and be impacted by the number of assemblies within your plumbing system.

What are common backflow preventer and assembly devices?

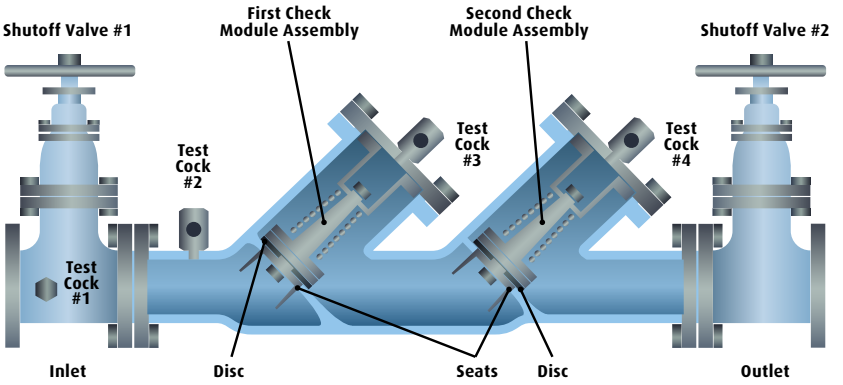
As specified in CSA Group Standards, a backflow preventer is any device designed to guard against backflow in low-risk applications. These devices can't be tested to ensure they are working:

- **AVB:** atmospheric vacuum breaker
- **HCVB:** hose connection vacuum breaker
- **DuC:** dual checks
- **DCAP:** dual checks with atmospheric port

A backflow assembly is designed to prevent backflow in higher-risk applications and requires testing and service:

- **DCVA:** double check valve assembly
- **PVB:** pressure vacuum breaker
- **RPBA:** reduced pressure principle backflow assembly
- **Air Gap:** this is not an assembly but an acceptable design to prevent backflow; requires annual inspection

Backflow Preventer (Example of a DCVA for moderate hazards)



Protect our Drinking Water

Homeowners share this responsibility to protect our water supply by having the proper systems in place and maintaining them.

Be Proactive, Be Registered.

Use the portal to register your backflow prevention devices, manage testing by certified device testers and view the status of your devices electronically.

For more information visit www.crd.bc.ca/crossconnection or email ccc@crd.bc.ca

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