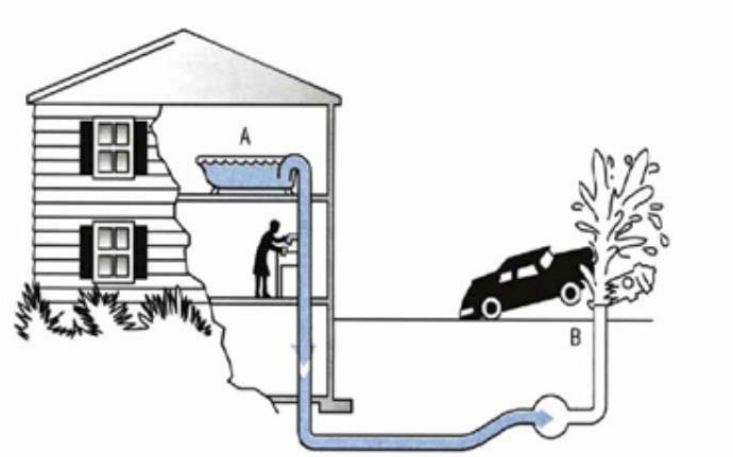
Consumer Guide to Backflow Prevention

The City of Hayward has a cross-connection control program to protect the City's drinking water distribution system from contamination caused by backflow. Under normal conditions, water from the distribution system flows into a consumer's premises. When backflow occurs, water from the consumer's premises flows into the distribution system. If that water is contaminated because of activities on the consumer's premises (for example, addition of rust-inhibiting chemicals to a boiler or use of photo-processing chemicals), the water can carry contaminants into the distribution system, possibly causing illness or even death.

What is a cross-connection?

A cross-connection is an actual or potential connection between a public or consumer's drinking water system and a non-potable (non-drinkable) source of water or other fluid. Examples of cross-connections are the connections between the drinking water distribution system and irrigation or lawn sprinkler systems, hose bibs, fire sprinkler systems, carbonation units, boilers, and chemical feed equipment.



Example of a Cross-Connection (Image: Plumbing & Mechanical Engineer)

How does backflow occur?

Backflow can occur when the water pressure in the consumer's premises is higher than the pressure in the water distribution system. This condition can be caused by a drop in water pressure in the distribution system (for example, because of firefighting or a break in the water main) or by the presence of systems within a consumer's premises that operate at higher pressures than that of the distribution system (for example, commercial boilers or steam heating systems).

How does Hayward protect against backflow?

The City requires the installation of backflow prevention assemblies whenever a potential hazard is present within a consumer's premises. Assemblies can be required near the water meter (as close as practical) to protect the public water supply and/or at the location of an internal hazard, such as a boiler, to protect the plumbing system within a consumer's premises. If multiple hazards exist, more than one backflow prevention assembly may be required, for example, one on a boiler and another on an irrigation system.

PUBLIC WORKS AND UTILITIES T: 510.881.7933 (Water Distribution Division)
777 B Street, Hayward, CA 94541 www.hayward-ca.gov

What is a backflow prevention assembly?

A backflow prevention assembly is a mechanical device that prevents water from flowing backwards. There are several types of backflow prevention assembly; the degree of hazard determines which type must be installed at a given location.

Example of a Backflow Prevention Assembly (USC Foundation for Cross-Connection Control and Hydraulic Research)

As an owner of a backflow prevention assembly, what are my responsibilities?

You are responsible for arranging for annual testing of your backflow prevention assemblies by contacting the City of Hayward Cross-Connection Control Program Specialist (510) 881-7966.

The City of Hayward Cross-Connection Specialist will contact you when you are due for annual testing in which your backflow prevention assemblies must be tested. If a backflow prevention assembly needs to be moved, removed, or replaced, then a plumbing permit must be obtained from the City Permit Center. A copy of the signed permit must be submitted to the Cross-Connection Control Program within 30 days of permit approval. Note: Whenever an assembly is moved or repaired, or a new assembly is installed, the assembly must be tested immediately and test results submitted as described above.

What happens if I don't have my assembly tested?

Annual testing and repair, if required, are necessary to ensure that backflow prevention assemblies are working properly. If you do not maintain your backflow prevention assembly, you put the public water system and occupants of your property at risk.

If assemblies are not tested and the results are not received, the Cross- Connection Program Specialist will send you a second notice requiring testing within 14 days. If you do not have your backflow prevention assembly tested in this time, then further action will include the termination of water service until the required actions are taken place, per the Hayward Municipal Water System Code Chapter 11, Section 1 –2.09, Appendix A.

Where can I get additional information?

For additional information you can call the Cross-Connection Control Program at (510) 881-7966 between 8 am and 4 pm.

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New Low-Lead Regulations Affecting Backflow Prevention Devices

A new law regarding the percent of lead content in plumbing fixtures that convey potable water for human consumption went into effect on January 1, 2010. **California Assembly Bill No. AB 1953** stipulates that any plumbing fixtures that convey potable water for human consumption (including backflow prevention devices) must contain no more than .25% percent total lead content. It also makes it "illegal" (punishable by fines) to install any plumbing fixture that does not meet these new low-lead standards.

The City of Hayward Cross Connection Control Program requires that all new installations or replacements of backflow prevention devices, including repair kits, be in compliance with this new law.

It is **YOUR** responsibility to comply with this new law and **NOT** install any backflow preventers or repair kits that are not approved as low-lead. There are many approved backflow prevention devices that comply with the new law (see the USC-FCCCHR approved backflow prevention device listings). In addition, it is illegal to sell any plumbing fixture, including a backflow prevention device, which does not meet the new law.

Plumbing supply houses and distributors are aware of the new requirements and will not sell a backflow preventer or repair kit to you if its application is for backflow protection on a potable water line for human consumption. It is **YOUR** responsibility to inform your supplier or distributor that the backflow devices or repair kits you are purchasing are for potable human consumption and to **VERIFY,** through on-site investigation, that the backflow prevention device protects potable water, landscape water, or both.

Exceptions to AB 1053:

Any landscape meter or dedicated fire system requiring backflow protection is not affected by this new law and can still be protected by an approved backflow preventer or repaired with a non-low lead repair kit with the higher lead content.

Enforcement:

The City of Hayward Cross Connection Program will be enforcing **AB 1953** requirements on any new or replaced backflow prevention devices or repair kits that are required as system protection in accordance with the **City's Backflow and Cross Connection Control Ordinance Chapter 11, Section 1-2.09**.

Should you have any questions concerning this, please contact the Cross-Connection Control Program at (510) 881-7966 between 8 am and 4 pm.