

RPZ - Water Backflow Assembly FAQ

What is backflow?

Backflow can reverse the flow of water or other substances into the public or private water system, resulting in chemicals or contaminants getting into the drinking water. In other words, due to changes in pressure, the water can flow in the opposite direction from what is intended. Therefore, the installation, inspection, and proper maintenance of Cross-Connection Control Devices is imperative to the safety of your drinking water (American Water Works Association).

What is a backflow prevention device or RPZ?

A reduced-pressure principal assembly is a mechanical valve assembly consisting of two internally loaded, independently operating check valves and a mechanically independent, hydraulically dependent relief valve located between them.

It is used for services with health hazards or non-health hazards and under conditions of back pressure. Among the mechanical backflow prevention devices, it provides the highest level of protection.

Can you give some examples of cross-connections?

- A hose is submerged in polluted or contaminated water
- A secondary source of irrigation water (from a well or pond) is pumped into an irrigation system that is directly connected to the potable water supply system
- An underground lawn sprinkler system is directly connected to the water supply system
- A fountain or swimming pool has a direct connection with the water system for filling

In all these examples, a sudden drop in water pressure could draw contaminants—chemicals, fertilizer, soapy water, or even bacteria—back into your pipes and drinking water supply. If ingested, any of these contaminants could be hazardous to your health.

Does a lawn irrigation system really need a backflow prevention device?

YES. Lawn irrigation systems are considered a hazardous cross-connection. All particulates that are in your lawn can seep into the underground pipes and enter the drinking water supply. This can be anything from fertilizers to animal feces. Properly working backflow prevention devices protect this from happening.

Do I have to get it tested if I don't use my sprinkler system anymore?

If you decide to no longer use your sprinkler system, you may cut and solder a cap on the pipe inside your home that leads to your sprinkler system. Once this is complete, the Water Department will need to be notified so they can inspect it.