



## **Backflow Prevention and your Responsibility: What to Do to Comply**

**Safe drinking water is priceless.** *Unlike other utility services such as gas or electricity, tap water is consumed*

Federal, state and even local regulations require drinking water, leaving the treatment plant, to meet standards for quality and safety. American Water takes these regulations seriously and not only meets them, but often exceeds them.

**Yet, treated water can be contaminated, within the water distribution system, by cross connections that result in backflow.** A cross connection is any actual or physical connection between a potable (drinkable) water supply and any source of non-potable liquid, solid or gas that could contaminate potable water by backflow.

**Backflow is the reverse flow of water or other substances through a cross connection into the treated drinking water distribution system.**

American Water can help ensure you are in compliance with federal regulations, and we are available to answer any questions related to backflow. Here are some useful facts about how contamination may occur:

### **Drinking water can become contaminated by backflow when:**

- A drinking water distribution main is unprotected because of the lack of a properly installed and functioning backflow prevention device on the service connection at the customer's supply.
- A physical cross connection is made between the drinking water distribution main and a contaminant source.
- Backflow conditions occur.

### **There are two types of backflow: backpressure and backsiphonage.**

Backpressure happens when the pressure of the contaminant source exceeds the positive pressure in the water distribution main. An example of backpressure contamination is when a drinking water supply main has a connection to a hot water boiler system that is not protected by an approved and functioning backflow preventer.

If pressure in the boiler system increases to where it exceeds the pressure in the water distribution system, backflow from the boiler to the drinking water supply system may occur.

**Backsiphonage is caused by a negative pressure (vacuum or partial vacuum) in the water distribution system.** This situation is similar in effect to the sipping of water through a straw. Negative pressure in the drinking water distribution system can happen because of a water main break or when a hydrant is used for fire fighting.

You can assist American Water in preventing backflow contamination by installing an approved backflow prevention device, if required, and by properly maintaining, and testing, your backflow prevention device(s). With more than 100 years experience, American Water can help address this issue and will be working with customers to take any corrective actions necessary to ensure compliance.

Installation of backflow prevention devices can be done by someone qualified to do this work and who can provide you with a cost estimate before installation.

Your cooperation with this cross-connection control and backflow prevention program will help to ensure the safety of drinking water for thousands who locally use American Water.