### What is cross-connection?

A cross-connection is a link between the public potable water system and any source of possible contamination. In addition to a hose submerged in a tub, bucket and pool, and a garden hose with an attached pesticide container, are such instances as:

- boiler water
- dialysis machines
- dental office equipment
- carbonated beverage machines; and
- groundwater well or cistern.

Each of these instances requires proper backflow protection to ensure your ACSA water remains safe.

Clean drinking water is EVERY customer's business. By taking the necessary steps to prevent backflow and cross-connection, you will help us protect the safety of our drinking water.



# Backflow Prevention & Cross-Connection Control



For more information on backflow prevention & cross-connection control, visit ACSA's website at www.serviceauthority.org or call 434-977-4511. How You Can Help Us Protect the Safety of Our Drinking Water

# What is backflow?

Backflow is the reversal of flow in a water system from the normal or intended direction of flow. It creates the opportunity for potential contaminants or pollutants from private plumbing systems in your home or business to enter the main water distribution system.

Backflow can happen either from back-siphonage or back-pressure. Back-siphonage is the reversal of flow caused by a reduction in the main line pressure. This can occur with a major break in the water main or during heavy water usage such as fire-fighting. Back-pressure is the increase in water pressure inside the home or business caused by elevation or mechanical pumping.

## How can I prevent backflow?

If you are a business, or have a lawn irrigation system or fire suppression system in your home, you already know about backflow prevention assemblies that the ACSA requires of you, and that must be tested annually by a certified contractor. The installation of a backflow preventer protects the ACSA drinking water system from possible contamination.

Think of the device as a security gate that allows water to flow in the right direction, but blocks it – and the contaminants it might be carrying – from returning to our water main if backflow occurs.

Many of you have simpler, but effective, backflow preventers on your outside faucets. Most homes built in Virginia in the past 40 years have faucets with a built-in vacuum breaker. These can also be purchased from a hardware or home improvement store for less than \$10, are simple to install, and help to safeguard our system.

#### Typical Backflow Prevention Devices





The ACSA asks that you follow a few key practices as you use water in your home, and especially around the yard:

DO: Recognize that the water in the plumbing of your home or business can potentially be drawn or forced into the main water system under certain conditions.

DO NOT: Submerge hoses into sinks, buckets, pools, spas, tubs, or radiators.

Cute? Yes. But bad for backflow prevention.



DO: Purchase vacuum breakers for your outside faucets if not already present. A plumber can assist you, if necessary.

DO NOT: Use spray attachments on garden hoses that contain chemicals - fertilizers, weed-killers, and pesticides - without a vacuum breaker on the faucet or other backflow protection.



Make sure chemical-filled spray attachments have backflow protection before you use them. Your home will be contaminated first if backflow occurs!