

## **QUICK TIPS TO PROTECT YOURSELF**

- Do not submerge hoses in buckets, pools, tubs or sinks. Always leave at least a two inch space between your hose end and any liquid.
- Install a hose bib vacuum breaker on all outdoor faucets. They are required, inexpensive, easy to install, and available at most hardware stores.
- Avoid using hose-end attachments that contain chemicals, such as fertilizers, insecticides, and weed killers. Instead, consider using alternate methods such as a hand pump sprayer or granular form of the chemical.

## **DOES YOUR VACUUM BREAKER STILL WORK?**

Under normal operating conditions, vacuum breakers should work reliably for several years. However, as with all mechanical devices, failures occasionally occur. Failures may occur due to component breakage, corrosion, or build-up of materials.

### **To test your vacuum breaker:**

Attach a nozzle that can be shut off to the end of a hose. With the nozzle shut off, turn on the faucet and allow the hose to pressurize. Then, shut off the faucet while the hose is pressurized. After a few seconds, the hose pressure should be released in a small spray as the atmospheric vent on the vacuum breaker suddenly opens.

### **If you notice a leak during normal operation:**

If leaks are detected, shut off the water supply, remove and inspect the entire assembly. Replace it if components are defective. Clean it by flushing water through it while working the spring mechanism to dislodge loose particles. If cleaning does not restore it to proper operation, then replace it.

## **IMPORTANT NOTICE**

*Cross-connections and backflows are most commonly found in irrigation systems and can create health hazards.*

*The safety of Hanover's water system is at risk when backflow prevention devices are not installed or maintained properly. These devices on irrigation sprinkler systems should be inspected and serviced annually. An excellent time to have backflow prevention devices inspected and serviced is in the fall when systems are winterized. When returning the system to service in the spring, care should be taken not to damage the device.*

**Please be a good neighbor and join Hanover County Public Utilities in keeping our drinking water system safe. For more information please contact customer service at (804) 365-6024 or visit us on the web at <http://www.co.hanover.va.us/utilities>.**

**Hanover County  
Department of Public Utilities  
P.O. Box 470 Hanover, VA 23069  
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## **Hanover County**

### **Department of Public Utilities**

*Reliably Providing Life's Little Comforts*

## **Important Information on Cross-connection and Backflow Prevention**



**Hanover: People, Tradition and Spirit**

## PROTECTING YOUR WATER

Have you ever considered all the places water is used in your home? You may be surprised how many diverse ways water can be used. The water entering your property is free of contamination; however, it is your responsibility to protect the water on your property and in your home. Drinking water systems may become contaminated through uncontrolled cross-connections or backflows.

## CROSS-CONNECTION

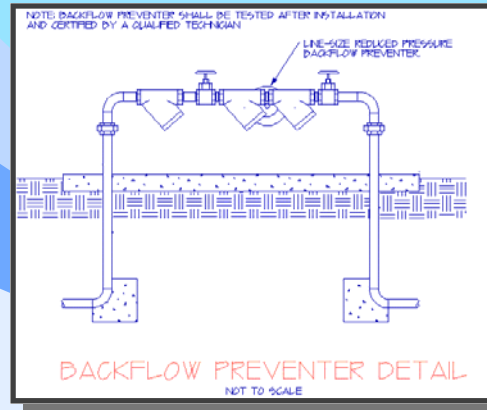
A “cross-connection” is any connection between your drinking water and a source of contamination. A cross-connection exists when there is a physical connection between drinking water piping and another system. An example is a lawn irrigation system or fire sprinkler system connected to both the public water system and another water source. It is important to eliminate cross-connections to prevent contamination of the water system.

## BACKFLOW

A “backflow” occurs when water in a hose or a water pipe goes backward toward your house and the County water system. This is caused by a change in water pressure. When a backflow occurs, contaminants can end up in your home piping. For example, if while washing your car there is a significant water pressure drop while the hose is submerged in a bucket of soapy water, the water could flow backwards if a proper backflow preventer is not installed. Care should be taken to make sure proper backflow preventers are installed on all fixtures.

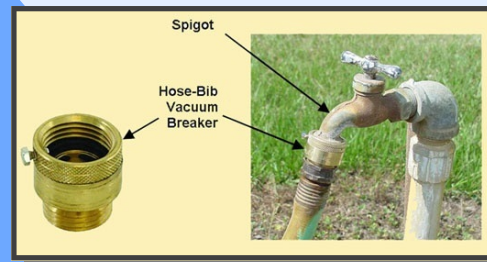
## IRRIGATION:

Irrigation systems make watering of your lawn or garden much easier, but if not properly constructed, backflow can occur. Backflow protection should be provided on all irrigation systems with a reduced pressure zone device (RPZ), which must be inspected and serviced annually.



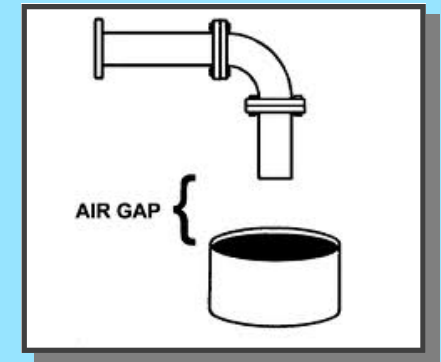
## HOSE BIBS:

The ordinary garden hose is one of the most common ways to contaminate the water supply. This can happen when one end of the hose is attached to an outdoor faucet, and the other end is connected to an aspirator type bottle or submerged in a liquid. Insecticides or other chemicals can be siphoned back into the drinking water supply. You can easily prevent the possibility of this type of contamination by installing a hose bib vacuum breaker. This is a small, inexpensive device that simply attaches to a threaded hose bib. Vacuum breakers are required to be installed on all hose bibs.



## SINKS, TUBS, TANKS:

The faucets in your bathroom or kitchen must be located so that the end of the faucet is above the overflow level of the sink or tub. Fill lines to water troughs, pools and tanks must also be physically separated or “air-gapped”. If there is no air-gap, the contents can be “back siphoned” into the water line.



## TOILETS:

Toilets need water to flush the waste materials into the sewer system. The water that flushes the toilet enters into the toilet tank from the small hose or pipe connected to the bottom of the tank. It is essential that the float-valve inside of the tank is the correct type so that the contents of the tank don't get back into the drinking water in your home.

