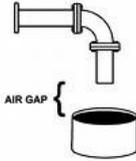


## BACKFLOW PROTECTION DEVICES

### 1. Air Gap Separation (AG)

An AG is a physical separation between the supply pipe (or faucet) and the flood level rim of its receptacle.



### 2. Pressure Vacuum Breaker (PVB)

The components of a PVB valve are: two independently acting valves (check valve & air valve); test cocks & 2 shutoff valves. This valve is commonly used for irrigation systems



### 3. Double Check (DC) Valve

The components of a DC valve are: 2 single check valves, test cocks & 2 shut-off valves. This valve is commonly used to protect against low to medium hazard installations such as firefighting systems which does not use toxic additives.



### 4. Reduce Pressure (RP) Valve

The components of a RP valve are: 2 single check valves, 1 relief valve, test cocks & 2 shut-off valves. This valve is commonly used to protect against high hazard installations such irrigation systems that use chemical additives; or firefighting systems that use toxic additives (antifreeze).



## Cross Connection Requirements

The Program surveys businesses & industries to identify actual or potential cross-connections, and determines the level of risk that these facilities represent to the distribution system.

Whenever a business is found to present a potential risk, an approved backflow device is requested to be installed. Once installed, all backflow devices must be inspected annually by a certified backflow technician and results must be sent and filed with the City .

Additionally, the City diligently check the plans of new businesses for compliance with cross connection & backflow requirements.

However, once the water enters your business property you become responsible for protecting water quality. As a consumer, you must be aware of cross connections and be responsible for preventing them.

(Brighton Municipal Code - Sec 15-36-75, Cross Connection Control)



### CONTACT INFORMATION

City of Brighton  
PW / Backflow Office  
22 S 4th Avenue  
Brighton, CO 80601



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## CROSS CONNECTION CONTROL PROGRAM

for Industrial & Commercial  
Utility Customers

# What is a Cross Connection?



# Learn how to prevent it!

The City of Brighton developed this  
brochure to assist businesses &  
industries on cross connection &  
backflow prevention compliance.

## CROSS CONNECTION & BACKFLOW PREVENTION

The City of Brighton proudly treats and supplies quality potable water to its customers.

But even the highest quality potable water can become contaminated if a backflow event occurs where a cross-connection exists.

Unsafe drinking water not only may result in sickness and serious illness to customers, but also may spread through the system impacting the remain of the community.

To be able to protect our drinking water from possible contamination while it flows through the distribution system, and to keep in compliance with Federal and State regulations, the City of Brighton created the Cross Connection & Backflow Prevention Program.

### WHAT IS THE DANGER?

Under normal flow conditions, potable water travels directly from the treatment plant to the customer's tap.

However, under certain situations, the direction of flow may reverse creating a **backflow** event. Backflow is caused when the distribution system's pressure drops; or if a connected external system operates at a higher pressure than the water service regular pressure.

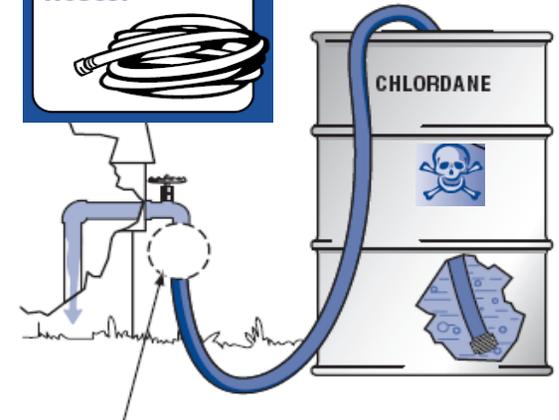
If a **cross connection** (non-authorized connection between the drinking water supply and any other source) exists and a backflow event occurs, the differential pressure can cause unknown contaminants to be drawn or forced into the potable waterlines.

This makes the water unsafe to drink and creates a health risk for you, your employees and your customers.

**Pollutants in your drinking water system are extremely dangerous, specially because consumers always assume that water coming from the tap is completely safe.**



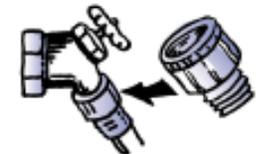
Did you know:  
most cross connections are created by hoses.



Recommended installation of hose bibb vacuum breaker backflow preventer

### How you can protect your drinking water

Attach a hose connection vacuum breaker to threaded taps.



This easy-to-install device prevents contaminated water from being siphoned through the hose. A vacuum breaker can be found at hardware stores. Just remember to drain the device before cold weather sets in, or it may freeze and break.