# **Definitions**

#### **Potable**

Water that is deemed safe for human consumption.

## Non-potable

Water that is deemed <u>not</u> safe for human consumption; contaminated in some way.

### **Backflow prevention assembly**

An approved mechanical device designed to prevent the backflow of used water, contaminants, or pollutants from the customer's piping into the public drinking water supply.

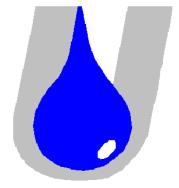
#### **Isolation**

An approved backflow assembly at the cross-connection on each piece of water using equipment, such as a chemical feed.

#### **Containment**

An approved backflow assembly on the water service line immediately following the water meter.

Urbandale Water Utility is committed to providing you with safe drinking water. Cross-connections are a serious problem that can result in water contamination, and possible illness or death. Your compliance with state and local plumbing codes help to protect the drinking water from possible contamination.



Urbandale Water Utility

3720 86th Street Urbandale, Iowa 50322 (515) 278-3940



Cross-Connection and Backflow What is it?

**Urbandale Water Utility** 

# **Urbandale Water Utility**

The Urbandale Water Utility is identifying actual and potential cross-connections within the water system. This effort will enable the utility to provide safe water to our customers and to protect the potable water system from contamination.

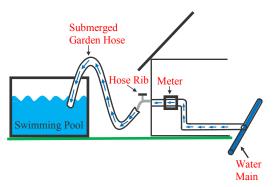
It is the customer's responsibility to protect the water quality after it enters the customer's service connection. It is important that customers do not allow any cross-connections to exist that would allow contaminated fluids or other pollutants to enter the potable water system.

#### **Cross-connection is;**

An actual or potential connection between the public drinking water supply and a customer's plumbing system that makes it possible for used water, pollutants, chemicals or contaminants to enter the public water system, by means of backflow.

### **Example of cross-connection**;

 A submerged garden hose creates a cross-connection



#### Backflow is;

The reversal of normal flow of used water, industrial fluids, chemicals or other pollutants as a result of a cross-connection. What causes backflow? There are two types of backflow:

# Backsiphonage and Backpressure

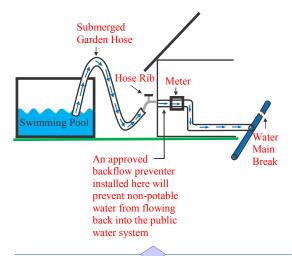
#### Backsiphonage is;

The reversal of normal water flow of contaminated or polluted water into the public water system caused by negative pressure (vacuum or partial vacuum) in the supply piping.

This can be created when there is stoppage of the water supply due to nearby fire water demand, pipe repairs or breaks in the city's water main. The effect is similar to sipping water thru a straw, which induces a flow in the opposite direction.

### **Example of backsiphonage;**

Backsiphonage
Non-Potable Water

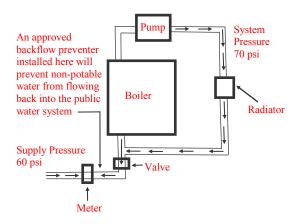


## Back pressure is;

The reversal of normal water flow of used, contaminated or polluted water in the public water system caused by an increase in the downstream pressure above that of the supply pressure. This can occur in heating system installations, elevated tanks and pressure producing systems. This high pressure to low pressure difference would allow contaminated water to flow backwards into the potable water supply

### Example of backpressure;

 Backpressure Non-Potable water



If a risk of a health hazard existed, a backflow assembly would need to be installed, for either isolation or containment purposes.

Please fill out the enclosed survey form and return it within 10 days. Thank you for your assistance.

\*psi=pounds per square inch