



Providing safe drinking water is the highest priority for a public water system.

Regulated by Idaho Department of Environmental Quality and the U.S. Environmental Protection Agency, your public water system follows strict standards to ensure that the public drinking water supply remains safe.

As a customer, you also have a responsibility to help keep the public water supply safe.

There are several things you can do in your home to help maintain clean drinking water for your family and your community.

- Educate yourself on the dangers of cross connections and how to prevent backflow.
- Properly dispose of household hazardous wastes, such as paint, cleaners, oil, batteries, electronics, laundry products, and yard products.
- Do not flush pharmaceuticals down the toilet.
- Teach your children where their drinking water comes from and how to protect it.

Want to find out more?

It is impossible to cover all of the information pertaining to cross connections and backflow in a pamphlet . We hope the preceding information will inspire you to further educate yourself on preventing contamination in your home. For more information, including prevention and trainings on backflow prevention, contact:

Idaho Department of Environmental Quality
1410 N Hilton
Boise, ID 83706
(208) 373-0502
www.deq.idaho.gov

Public Health Offices
<http://www.healthandwelfare.idaho.gov>

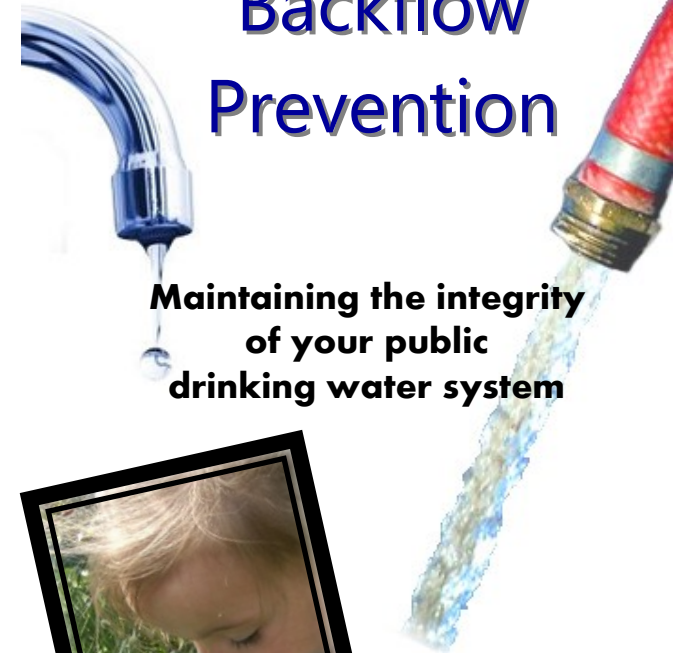
Idaho Rural Water Association
6065 W Corporal Ln
Boise, ID 83704
(208) 343-7001
www.idahoruralwater.com

- www.penlight.org/waterServices.aspx
- water.epa.gov/infrastructure/drinkingwater/pws/crossconnectioncontrol
- www.abpa.org



Created by IRWA. 2013.

Backflow Prevention



Maintaining the integrity of your public drinking water system



What is backflow?

Backflow occurs when water is drawn back into your main water supply from another source. The water entering the drinking water system may be contaminated, and will remain in water lines until it is drained from another fixture in your home or your neighbors'. A serious health hazard could result when this contaminated water is used for drinking, cooking or bathing.

Locations in your plumbing system where backflow can potentially occur are called **cross connections**. Some examples of cross connections include:

- A hose connection to a chemical solution aspirator for herbicides, pesticides, and fertilizers.
- Lawn irrigation systems.
- Water softeners.
- Hose connections to a laundry tub.
- Swimming pools.

How does backflow occur?

Backflow is caused by either **backsiphonage** or **backpressure**.

Backsiphonage occurs when a vacuum is induced on a piping system, just like drinking from a glass with a straw. Any hose can act as a "straw," allowing undesirable liquids to be drawn through it.

Backpressure occurs due to a drop in pressure from the water system, as illustrated by the cartoon below. It is important to note that a drop in pressure is out of your control and can occur at any time.

You are drinking the same water as your neighbor - we are all connected! Help keep your family and your community safe.

What should you do?

Cross connections are often deemed unlawful by city codes. Generally city ordinances require backflow preventers to be installed where cross connections may occur. These devices must be tested annually to ensure they are functioning properly.

There are two types of backflow preventers: backflow prevention *devices* and backflow prevention *assemblies*. Both are designed and installed to prevent the flow of water backwards through a pipe. Besides commercial uses, they are commonly needed for home irrigation systems.

In places where installation and testing of mechanical backflow preventers is not possible, an air gap separation is usually required.

Contact your City Hall for more information on local requirements and how to comply.

Historically, cross connections have been one of the most serious public health threats, and many times are present in residential water systems.

