How can we prevent backflow incidents?

For your safety – and required by law – all customers must install and maintain backflow prevention devices in their water systems.

Additionally, customers should implement good usage habits to reduce the potential for backflow incidents. Best practices include:

- Never leaving a hose submerged in a bucket of non-potable liquid.
- Ensuring the water level in any tank of liquid is below any type of faucet or inlet level.

Following this advice will create an “air gap” that can help prevent a backflow incident.

Taking action for safety

Under the Safe Drinking Water Act, the Environmental Protection Agency and OSHA as well as the individual laws of many states through their Departments of Environmental Protection require that customers eliminate cross-connections or install backflow prevention devices. These regulations apply to individual homes, businesses, and commercial and industrial establishments.

The regulation requires that backflow prevention devices be tested at least once each year. When necessary, they must be repaired to ensure proper operation.

What is a Cross-Connection Control Program?

The purpose of a Cross-Connection Control Program is to protect the public potable water supply from the possibility of contamination or pollution by isolating, within its customers’ internal distribution system, contaminants or pollutants which could backflow or back-siphon into the public water system.

The program will promote the elimination (or control) of existing cross-connections between potable water systems and non-potable systems.

National Water Specialties Company (NAWSC) is committed to protecting drinking water quality and is working to solve this problem by reducing the potential for backflow incidents to occur.

Contact NAWSC at 844.605.5213 or NAWSC.net for more information about cross-connections at your home or business.

What You Need to Know About Backflow Prevention Systems

Do you have a public water service connection?
Are you a commercial or industrial property?
Is there a kitchen, bathroom, or faucet in your building?

If you answered “Yes” to any of these questions, you’re in danger of contaminating your water supply.

Contact NAWSC at 844.605.5213 or NAWSC.net for information about cross-connections at your home or business.
What is Cross-Connection?

According to the US Environmental Protection Agency (EPA), a cross-connection is any point in the water supply system where non-potable, or non-drinkable, water may be introduced to potable, or clean, sources. All service lines connected to public water systems are therefore potential cross-connections.

You, the business or home owner, are responsible for these cross-connections.

What is backflow?

Backflow is the undesirable reversal of the flow of water from its intended direction in any pipeline or plumbing system. Put simply, a typical water distribution system allows water to flow from a service line to your establishment. Hydraulic conditions within the system may deviate from the normal conditions, causing the water to flow in the opposite direction. Eventually, this will lead to the local public water supply, and create potentially hazardous "cross-connection".

Why do we need to prevent backflow incidents?

With any backflow incident there is a risk of non-potable materials – those not intended for human consumption – flowing back into the local water system. This could include wastewater, industrial fluids, chemicals, fire sprinklers, or lawn irrigation water.

What causes backflow?

There are two main causes of backflow: back-siphonage and backpressure.

Back-siphonage

When a negative or reduced pressure is applied at a building's tap, creating the potential for contaminants to be siphoned into the drinking water system. A pressure change could be caused by:

- Heavy water usage on the system (i.e. fighting a large fire)
- Water main breaks
- Unauthorized use of a fire hydrant

Backpressure

Backpressure incidents can occur when the pressure on an individual system exceeds the pressure in the distribution system, resulting in undesirable gasses or liquids being introduced into the drinking water supply. Some examples include:

- A car wash that re-circulates soapy water
- A manufacturing plant that uses substantial water pressure for production