

# WHAT IS BACKFLOW?

Most of the time water flows "forward" from the water supply system into your home. Backflow is the term used to describe the "backward flow" of water into the water supply system. In other words, backflow would occur when water from your home "flows back" into the public water supply. Or backflow can be caused when water from a garden hose "flows back" into your home. Backflow can be caused by either back pressure or back-siphonage of your plumbing system. If water flowing backwards contains hazardous chemicals or bacteria, it can cause an unhealthy or dangerous situation.

In order to address this potential problem on a community-wide level, The Safe Drinking Water Act requires that every customer install backflow preventers at their own expense. A backflow preventer

acts as a physical barrier to water flowing in the wrong direction. Since 1983, we have required these devices on water lines serving industrial and commercial users as they pose the greatest backflow risk to the water supply. As another precaution, since 1988, the North Wales Water Authority has been installing residential backflow preventers on all new and replacement water meters to help prevent the potential threat of backflow. Today, the majority of our customers have backflow preventers installed in their homes. We are very concerned about delivering the safest water possible and have gone to great lengths to minimize this health and safety risk.

# HOW DOES IT OCCUR?

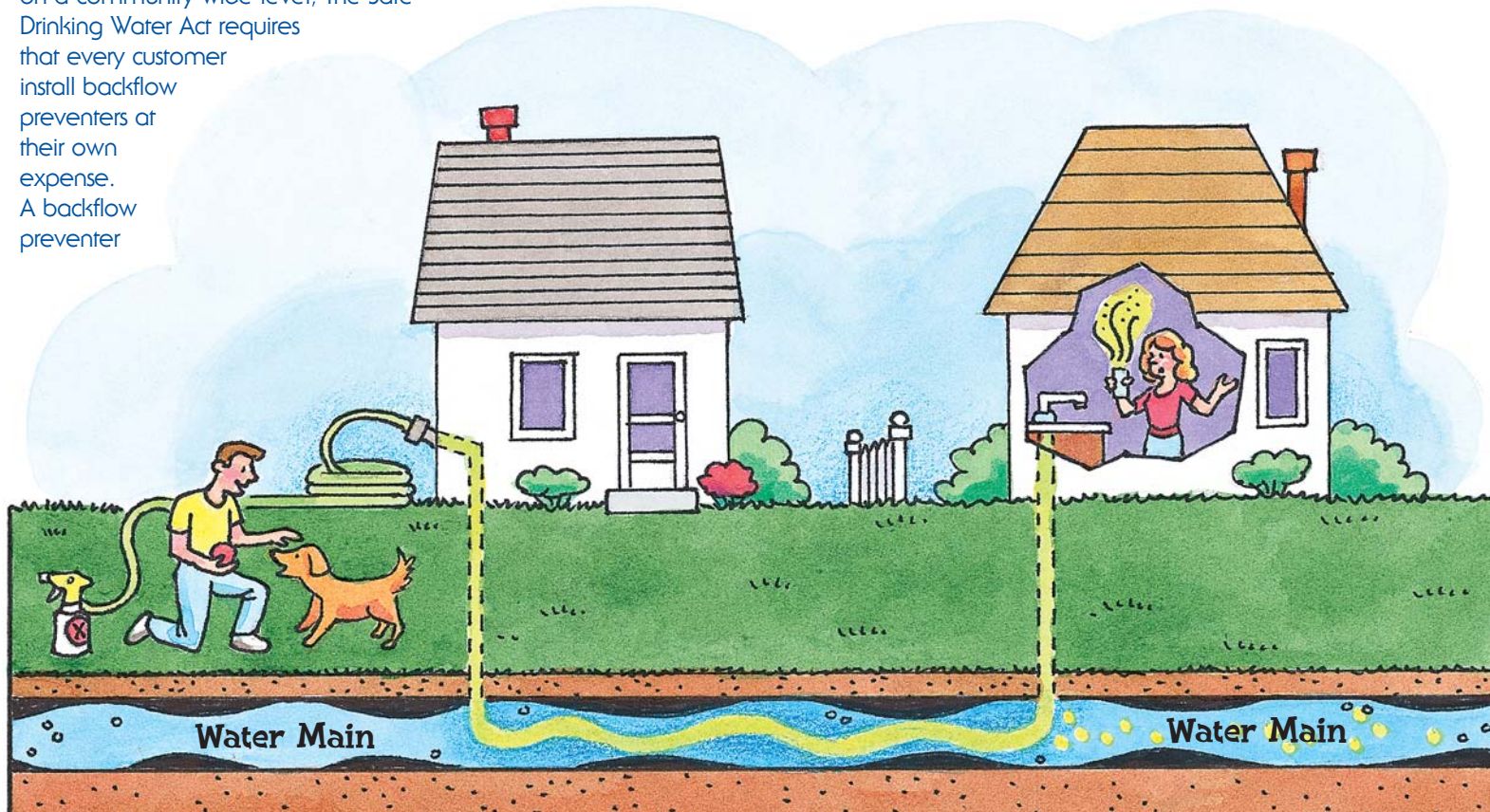
Your garden hose is one of the most common offenders as a cause of backflow. Say you are watering your garden with a fertilizer or pesticide applicator attached to your hose. The phone rings and you leave the garden. While you are on the phone, there is a drop in water pressure in the supply system that causes a vacuum. Like sucking on a straw, the vacuum will pull the pesticide-laced water into your home.

Then the next time you or your neighbors turn on a faucet, the water could be laced with toxic chemicals.

Water pressure drops are not uncommon. It may happen when firefighters battle a nearby blaze or before a crew repairs a broken water main.

## HOW TO PREVENT BACKFLOW

- Never submerge hoses in buckets, pools, spas, tubs or sinks. They may contain harmful cleansers or dangerous bacteria.
- Always keep the end of the hose away from possible contaminants.
- Do not use any spray or cleaning attachments on your hose without a backflow prevention device on the hose. This includes pesticide applicators, portable pressure washers, drain openers and radiator flush kits. All of these devices utilize chemicals, detergents and waste water which are toxic and can be fatal if ingested.





## IS MY WATER SAFE TO DRINK?

Yes. We must continue to raise consumer awareness of the backflow issue. The North Wales Water Authority takes great pride in delivering superior quality drinking water to our 25,000 customers. We do everything in our power to deliver our customers the safest water so that you can feel confident about the water you and your family drink.

### Benefits

With a backflow prevention device and thermal expansion tank, you'll have less wear and tear on your plumbing fixtures and your appliances.

## HERE'S WHAT YOU CAN DO TO HELP

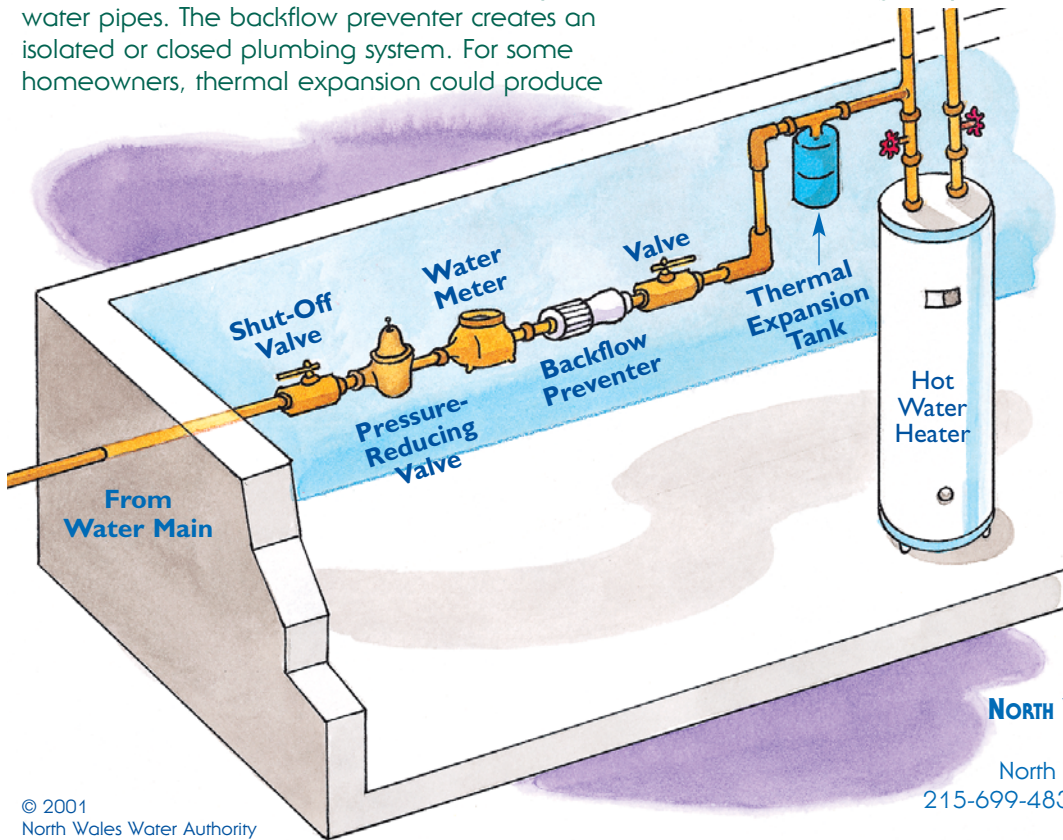
Once we install a backflow preventer in your home, water will be unable to flow back into the public water pipes. The backflow preventer creates an isolated or closed plumbing system. For some homeowners, thermal expansion could produce

leaky faucets or set off the relief valve on hot water heaters, or in some cases, other damage may occur. Thermal expansion occurs when your hot water heater heats the water, causing it to expand.

We encourage you to consult a certified plumber if you have any doubts about your plumbing system. A plumber may recommend the installation of a thermal expansion tank on your hot water heater. A pressure-reducing valve may also be required if your water pressure exceeds 75 pounds per square inch (psi). The illustration provided shows these devices installed in a typical basement.

Our staff is dedicated to providing your household with superior quality drinking water that exceeds the standards. With the installation of a backflow preventer, you can feel confident that you are helping to protect yourself and your family as well as your neighbors and community.

How do I know if I have a preventer or not? Please refer to this diagram provided or just call our office.



# Can Backflow be a Threat to



# Your Drinking Water?

