

POTENTIAL RESIDENTIAL CROSS CONNECTIONS:

1. **Private Wells and Secondary Water Sources** : A well or secondary source of water on a property is a potential cross connection. Wells or secondary water sources are prohibited from being connected to **Brighton's Water System**. A backflow preventer on the public water supply is always required when secondary sources of water are present on a customer's property.
2. **Lawn Irrigation Systems** : Underground irrigation systems are a direct cross connection, and the public water supply must be protected with a suitable backflow device. Surface water can be siphoned back into your plumbing system through an automated lawn irrigation system unless a proper backflow device is attached. If the system uses a pump or has fertilizer or chemical injection, additional backflow protection and backflow testing is required.
3. **Swimming Pools or Hot Tubs**: Pools and hot tubs that are permanently connected to the home plumbing system are direct cross connections and must be protected with a suitable backflow device. An unprotected cross connection could draw pool water and chemicals back into your household plumbing system and public water supply. When filling a pool or hot tub with a hose, never submerge the end as this is another cross connection. Always leave an air gap when filling pools, tubs, sinks or containers.
4. **Photo Lab Facilities**: Home use of photographic chemicals, process chemicals, biological laboratory supplies, veterinarian supplies or other laboratory chemicals can cause contamination due to an unprotected cross connection. A suitable backflow device is necessary to protect the home plumbing system and public water supply.
5. **Boiler Systems for Heating**: These systems are not common but do exist in some homes. Normally these systems are in larger homes. Water is used to replenish the boiler which also may have chemicals. This cross connection must be protected with a suitable backflow device to prevent contamination of the home plumbing system and public water supply.
6. **Home Medical, Dental or Dialysis Equipment**: Similar to equipment found in medical offices, these devices are sometimes used in the home. When connected to the water supply, these cross connections must be protected with a suitable backflow device to prevent contamination of the home plumbing system and public water supply.
7. **Other Potential Cross Connections**: One of the most common cross-connections in homes is a laundry sink with a threaded faucet for a hose connection. The hose could be submerged in the sink, which contains a toxic liquid, resulting in a health threatening cross-connection. A garden hose submerged in a sink or connected to a container containing chemicals (such as spray weed killer or liquid fertilizer) or fertilizer is a serious cross connection. A sudden drop in water pressure from a water main break or from water being used to fight a fire can siphon water back into your home plumbing system or the public water supply. A vacuum breaker is a simple inexpensive device that can be installed on the faucet or hose to prevent contamination. Most bathtubs and sinks have an air gap. This space between the highest water level in the fixture and the outlet of the water is the best form of backflow protection. Never leave the end of hose submerged in a tub, pool or container. Residential fire protection systems, in-home water treatment systems, carwashes, solar heating and decorative ponds and soaking tubs are other possible cross connections. Residential cross-connections can also occur if the wrong type of toilet tank ballcock assembly is used. If the wrong type is used, water can be drawn out of the toilet tank back into the house's plumbing and the Utility's distribution system.