



CITY OF DOVER

CROSS CONNECTION CONTROL
PROGRAM

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What is Cross Connection ?



<https://www.redwoodcity.org/departments/public-works/water/wells-cross-connection>

- A cross-connection occurs when there is an actual or potential connection between the drinking water supply and a non-potable source.

Examples:

- Swimming pools, fire sprinkler systems, boilers, or submerged inlets (lawn sprinklers, drinking fountains, utility sinks) etc.



[https://dnr.mo.gov/document-search/cross-connection-identification-backflow-prevention-customer-pub2940/pub2940#:~:text=A%20cross%2Dconnection%20is%20an,utility%20sinks%2C%20etc.\)](https://dnr.mo.gov/document-search/cross-connection-identification-backflow-prevention-customer-pub2940/pub2940#:~:text=A%20cross%2Dconnection%20is%20an,utility%20sinks%2C%20etc.))

What is Backflow ?

➤ Backflow is an undesirable reversal of flow of water that could introduce contaminated water from a private property to the potable water source.

Causes of Back Flow

➤ A pressure change that pushes water opposite to the normal flow direction. These pressure changes can be induced by gravity, vacuum formation, and other physical effects. Based on how the pressure difference is established, the causes of backflow can be divided into back siphonage and back pressure.

➤ Back siphonage is a reversal of normal flow in a system caused by a negative pressure (vacuum or partial vacuum) in the supply piping.

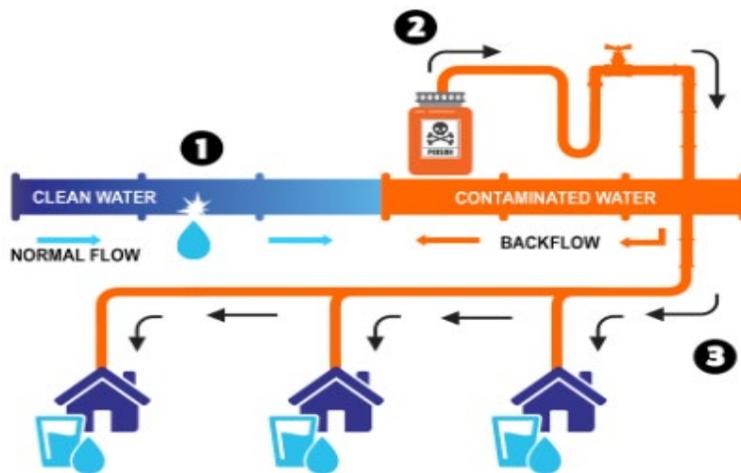
Dangers of Backflow and Cross-Connections

(source: <https://www.kerrilletx.gov/1728/Backflow>)

- Can cause non-potable or non-drinkable water to enter the drinking water supply, which could be a public health risk.

Examples of non-drinkable water entering the public drinking water supply:

- Commercial or residential gardening, where a hose is left running in a planter or a container with mixed chemicals such as fertilizers or pesticides.
- Car wash facilities, where a connection between the scrubber and rinse cycle pipe allows recycled water to flow into the public drinking water supply.
- Propane gas leaks into the public drinking water supply due to washing machine problems.
- Carbonated water from a restaurant's soda dispenser enters the public drinking water supply



How to Identify Actual and Potential Cross- Connections

- Cross connections can be identified by looking for physical interconnections (or arrangements) between a customer's plumbing and the public drinking water supply.
- Cross-connection inspection can be conducted by ASSE-certified personnel who are trained to identify potential cross-connections, assess the risk of contamination, and recommend appropriate control measures. These inspections are essential for ensuring that the public drinking water supply is safe and meets regulatory requirements.

Preventive Measures to Reduce or Eliminate Cross-Connection and Backflow Risks



https://www.myutility.us/images/default-source/site-wide/water-safety/hose-bibb-with-vacuum-breaker-circled.jpg?sfvrsn=5d472d5b_4



<https://dnr.mo.gov/document-search/cross-connection-identification-backflow-prevention-customer-pub2940/pub2940#:~:text=A%20cross%2Dconnection%20is%20an,utility%20sinks%2C%20etc.>

- Identify and be aware of potential cross-connections to your water service line.
- Install appropriate backflow prevention devices or assemblies at cross connections, like installing a hose bibb vacuum breaker on an outdoor hose spigot.
- NEVER submerge a hose in soapy water buckets, pet watering containers, pool, tubs, sinks, drains or chemicals.
- NEVER attach a hose to a garden sprayer without the proper backflow preventer.
- Ensure the water level in any tank of liquid is below any type of faucet or inlet level.

How to Report Suspected Cross Connection or Backflow Event

- Reporting suspected cross-connections or backflow events to the public water system is crucial to prevent the contamination of drinking water.
- Contact the City of Dover to report suspected cross-connections or backflow events. Be specific and provide photos if possible:
 - Phone: 302-736-7025
 - E-mail: waterquality@dover.de.us