

Water Industry Backflow Prevention Overview (3015)

Course Description

Backflow is an undesirable flow condition caused by a differential pressure that causes the flow of water and other substances into the distribution pipes of a potable water supply system. This can result in contamination of the potable water supply. Backflow contamination can occur if there are existing cross-connections, backsiphonage or backpressure conditions, and unprotected cross-connection or failure of protection devices. Elimination of cross-connections and prevention of backflow is essential to maintaining the safety and health of the water supply.

This course highlights the common conditions that result in backflow, why cross-connection control and backflow prevention are necessary, the indicators of backflow contamination, methods for mitigating backflow events, and the elements of a typical backflow prevention program.

Course Objectives

After successfully completing this course, you will be able to:

- describe in detail cross-connections, backflow, back-siphonage, and backpressure
- identify five examples of common cross-connections
- explain why cross-connection control and backflow prevention are necessary
- illustrate back-siphonage and backpressure and list potential causes for each
- assess the conditions needed for backflow to occur
- list and explain five indicators of backflow
- name four methods for mitigating backflow events
- create and implement a backflow prevention program

Agenda

- Introduction and Definitions – 5 minutes
- Background on Public Drinking Water Safety – 5 minutes
- Common Cross-Connections – 5 minutes
- Contamination Events – 5 minutes
- Back-Siphonage – 5 minutes
- Backpressure – 5 minutes
- Conditions Necessary for Backflow to Occur – 5 minutes
- Detecting Backflow Occurrences – 5 minutes
- Mitigating Backflow Events – 5 minutes
- Cross-Connection Control Programs – 5 minutes
- Developing the Program – 5 minutes
- Implementing the Program – 3 minutes
- Conclusion – 2 minutes