

## Coliform Sample Collection PARTICIPANT HANDOUT

### Overview:

This lesson focuses on sample collection for the Total Coliform Rule (TCR), even though the best practices mentioned here apply to sampling for other parameters as well. Several types of samples can be collected for total coliforms. These include routine samples, repeat samples, additional routine samples, replacement samples, and special samples. Only routine samples and repeat samples are discussed in this lesson.

### Learning Objectives:


At the completion of this lesson, participants should have the ability to:



- Explain why coliform sampling is important for a public water system
- Summarize the purpose of a sample siting plan, and discuss proper coliform sample collection procedures
- Identify factors, conditions, and common issues that can lead to undesirable results when collecting samples
- Recognize the challenges in collecting a valid coliform sample

### Key Concepts:

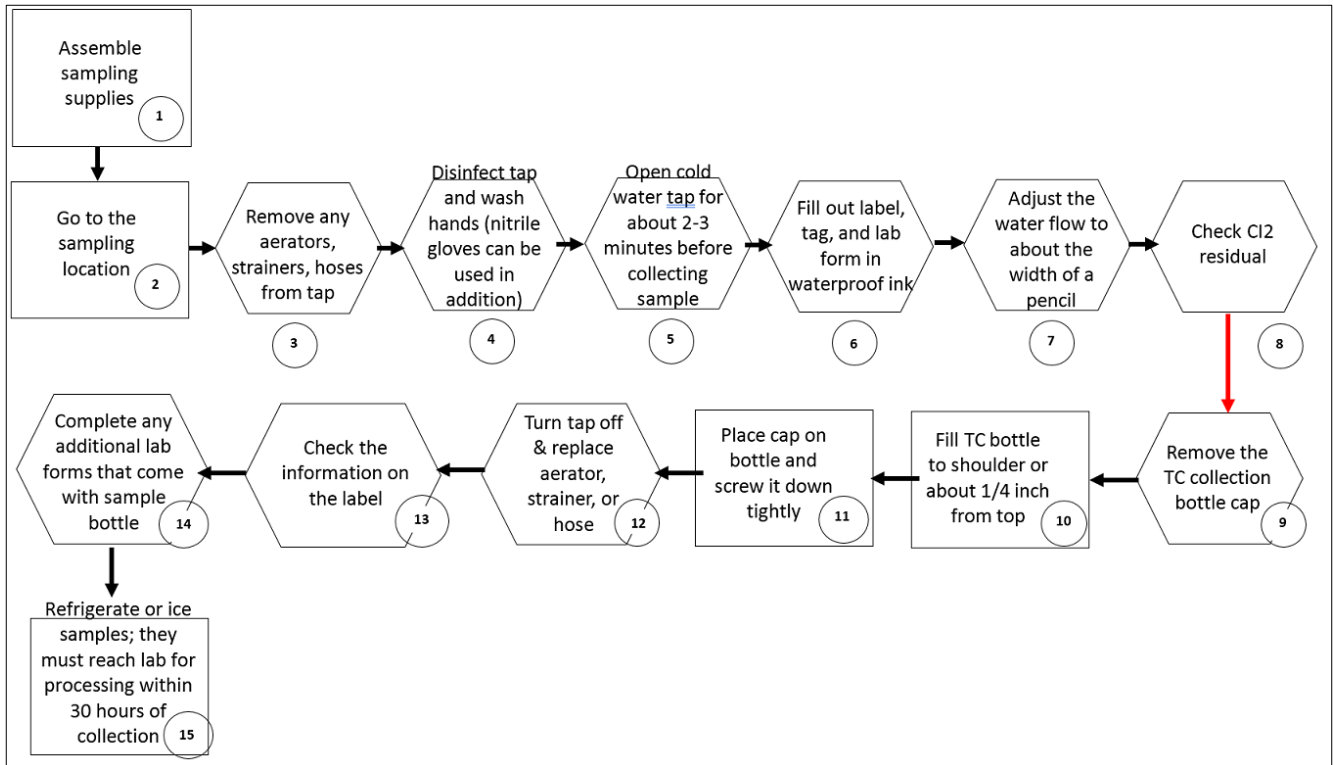
## Coliform Sampling: Why?

- Total coliforms in a Public Water System:
  - Are an *indicator* of pathogen contamination
  - Are a warning sign that your system may also be vulnerable to fecal contamination





## Coliform Sample Collection Procedures



### Coliform Sampling: Best Practices

- Improper sampling is the most common reason for positive results (false positive)
  - Repeated sampling = extra time, effort, money
  - May lead to unnecessary MCL violation and subsequent corrective measures



### Common Issues that can lead to undesired results

- Improper Sampling Techniques
- Not Flushing the Tap
  - Improper Handling of Bags
  - Exceed 30 Hour Holding Time



#### Additional Resources:

- RCAP's Resource Library: [www.rcap.org](http://www.rcap.org)
- A Small Systems Guide to the Total Coliform Rule
  - <http://www.epa.gov/ogwdw/disinfection/tcr/pdfs/small-tcr.pdf>
- AWWA Video: Reliable Coliform Sampling for Water Systems
  - <http://www.awwa.org/store/productdetail.aspx?productid=7089>