



Drinking Water Sample Collection Instructions

Obtain a Drinking Water Sample Collection Kit from Murray-Brown Laboratories containing: collection bottle, sample label, sterile sample bag, and Drinking Water Sample Submission Form.

The collection bottle is sterile; the sampler should be careful not to contaminate the container or lid.

Gloves may be worn. Keep the bottle closed until the moment of collecting the sample.

The collection bottle contains a white powder, sodium thiosulfate, which neutralizes up to 15 mg/L of free chlorine; it will have no effect on the water sample other than to dechlorinate the sample. **DO NOT EMPTY THIS POWDER FROM THE BOTTLE.**

ALWAYS COLLECT COLD WATER; NEVER SAMPLE HOT WATER.

Choosing a Sample Collection Site

1. For samples collected by Public Water Systems (PWS) for *compliance purposes* per the Total Coliform Rule (TCR): collect samples from sites as indicated in your Monitoring Plan, from a location and faucet which does not have a high potential for contamination (which could yield a positive result that is not truly representative of the water quality in the distribution system).
2. For samples collected for *non-compliance purposes* from a production facility or home to assess water which may be directly consumed by humans, or come into contact with goods destined for human consumption: the sample must be collected from a representative tap which supplies such water, no matter its condition. You may choose to skip steps 2, 3 and 5 below.

COLLECTION PROCEDURE

1. Wash your hands; poor hygiene can result in samples becoming contaminated. You may choose to wear gloves.
2. Carefully remove the aerator if one is present.
3. Disinfect the faucet by either flaming the tap or spray the faucet using a strong chlorine bleach solution.
4. Allow the COLD water to run freely at a steady flow for 5 to 6 minutes (until a steady water temperature is achieved) to flush the pipes. After 5 to 6 minutes adjust the flow to about the width of a pencil (approximately ¼ inch in diameter).
5. For samples collected by PWS for *compliance purposes* per the TCR, determine the chlorine residual (mg/L).
6. Remove the seal from the Collection Bottle and discard. Carefully remove the lid without touching any part of the bottle or lid that will come in direct contact with the water sample. **DO NOT RINSE THE BOTTLE BEFORE COLLECTING THE SAMPLE.**
7. Using the pencil-sized stream of water, fill the Collection Bottle so that the meniscus of the water is just above the line near the top bottle. In this way **at least and as close to** 100 mL of sample is collected. **DO NOT FILL THE COLLECTION BOTTLE FULL;** one inch of air space is required to facilitate proper mixing at the laboratory.
8. Replace the lid carefully to reduce contamination potential; secure the lid tightly.
9. Complete the Sample Label and place it on the Collection Bottle; place the sample inside the sterile sample bag (or Ziploc bag—store each sample in its own sterile sample bag if collecting multiple samples. See below for cooler packing and transit instructions.
10. Complete the Drinking Water Sample Submission Form or Chain of Custody equivalent.

PACKING & TRANSIT

- After Step 9, the sample should be iced immediately, if possible, and held at <10°C during transit to the laboratory: package the sample in a clean shipping or transport cooler or foam box which contains ice packs (or wet ice in Ziploc bags); securely seal the lid; include the signed and dated Drinking Water Sample Submission Form; transport or ship to MBL for analysis.
- **DO NOT FREEZE THE SAMPLE;** do not use dry ice.
- The time between sample collection and start of analysis at the laboratory must not exceed 30 hours.
- If the package is being shipped, packages should be sent priority overnight.