

# The Truman Lab

## Quick Drinking Water Collection Guide: Bacteria

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### 1.0 SCOPE AND APPLICABILITY

This guide provides abbreviated instructions for the collection of drinking (ground) water samples to be analyzed for total coliforms and *E. coli*. For more in-depth information, visit <https://www.hstcc.org/water-testing>.

### 1.1 GENERAL CONSIDERATIONS

- The Chain of Custody form must be completed and delivered with samples. Other required supplies include the sample bottle, permanent pen *and* marker, and safety equipment, as appropriate.
- All sample **bottles** must be labeled by the sample collector with the collection date and collection time **in 24-hour time**. Samplers must also initial bottle **caps**. All sample **bottles and caps** must be pre-labeled by laboratory staff with a unique sample number.
- Samples must not be taken on a Friday or the day preceding a federal holiday, as many require a 24-hour incubation time before analysis. Samples should be delivered before 4 p.m. to provide sufficient time for pre-analysis procedures.
- Ensure health and safety precautions are met before sampling.

### 2.0 PROCEDURE

**2.1.1** Use sterile, non-fluorescent 120mL bottles that are to be filled with 100mL of sample from frequently used indoor faucets. Bottles must be obtained from The Truman Lab. Bottles must contain sodium thiosulfate to neutralize any effects of chlorine.

**2.1.2** Remove any aerators, screens, or filtration systems from the faucet. Turn on the cold water and adjust the water flow so that a steady stream of pencil-thin water flows from the faucet. Allow the water to run for 5 minutes.

**2.1.3** Remove the cap of the sample container. Do not allow the inside of the bottle, cap, or the bottle threads to come in contact with hands or surfaces.

**2.1.4** Holding the bottle by the base, fill the bottle to *slightly* above the 100mL line, taking care not to over or underfill the bottle. If the sample is over or under filled, carefully adjust the volume of water by pouring or filling until there is 100mL of sample. Replace the cap. If significantly more than 100mL is provided to the lab, it cannot be analyzed. Samples cannot be analyzed if there is less than 100mL of water. Public drinking water samples for compliance testing (such as by schools or towns) cannot pour-off water samples if overfilled due to the loss of sodium thiosulfate and must instead use a new bottle.

**2.1.5** Using a permanent marker, label the bottle with the collection date and collection time in 24-hour time. Initial the cap. Complete the Chain of Custody form and deliver with the sample or via email. Keep the sample refrigerated or in an ice chest until delivery to The Truman Lab. If the sample is kept in an ice chest, place the sample in a plastic bag first to avoid contact with melting water. Deliver samples within 24 hours from the time of collection and before 4:00 p.m.