



Total Coliform Bacteria Sampling Instructions

Selecting the Sampling Tap:

It is important to select a proper sampling tap which is clean and free from contamination. The tap nearest the well or incoming water line should be selected. Taps which are subject to exterior contamination, because they are too close to a sink bottom or the ground, should be avoided. Threaded taps and taps with aerators, which harbor bacteria, should not be used. Taps that do not provide a steady stream of water, or leak, should not be used. Failure to select the proper tap or follow the sampling instructions may result in a contaminated sample.

Collecting the Sample:

1. Wash hands thoroughly before collecting water samples.

2. The sampling kit should include one sealed, sterile 120ml plastic bottle preserved with sodium thiosulfate in the form of a pill or powder, one chain of custody form, and one blank label. Sample bottles should be examined when received. If, for any reason, the sterility of a bottle is in question (i.e. cracked bottle and/or cap, missing seal, etc.), the bottle should not be used. Please notify the laboratory and new bottles will be provided to you.

3. Do not open the bottle until you are ready to collect the sample.

4. After the proper sampling tap has been selected, it must be sterilized. To sterilize the tap, apply flame for a few seconds using a lighter or match.

5. Open the tap so that a smooth flow of water, at moderate pressure, is obtained. Ensure that there is no splashing. Allow the water to flow until it is as cold as it will get (approximately 2 minutes). **Do not change the flow rate while collecting the sample.**

6. Open the sample bottle. **Do not lay down the bottle cap or put it in a pocket.** Hold the bottle in one hand and the cap in the other. Keep the cap right side up, thread side down, and be careful not to touch the inside of the cap and the bottle.

7. Tip the bottle slightly so that the water flows down the side wall of the bottle and bring the bottle upright as it fills. The cap must be immediately and securely affixed.



The sample volume must be at least 100ml and no more than 120ml.

These volume levels will be clearly marked on the bottle for reference. Filling between these lines will ensure that at least one inch of headspace is provided to facilitate mixing of the sample prior to analysis. If the volume submitted to the laboratory is below 100ml, the sample will be rejected.

Do not overflow the sample bottle.

8. Once the samples have been collected, fill out the analysis form. Ensure that you identify the locations at which each sample is collected on the analysis form and on the bottle label, along with the date and time of collection.

9. The sample must arrive at the laboratory within 24 hours of collection.

If you have any questions regarding sampling, please call Suburban Laboratories at (708) 544-3260. If you have any questions regarding total coliform bacteria in drinking water, including the interpretations of results and what to do if the result is positive; please call the United States Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

REFERENCE: (IEPA/PWS/89-090abc) Sample Collector's Handbook, Illinois Environmental Protection Agency Division of Public Water Supplies, 4/89

