

Private Residential Collection of Microbiological Drinking Water Samples: Total Coliform & *E.coli*

The prescribed procedures must be followed in detail for a valid laboratory analysis.

- 1. Select the sampling tap.** Select a faucet that does not swivel or leak. Do not sample from hoses or faucets with extension hoses.
- 2. Prepare the tap for sampling.**
 - a. If the tap contains an aerator or screen, remove it prior to sampling.
 - b. Run the tap for at least 1 minute to flush the system. Turn the water off.
 - c. Pour some unscented residential bleach into a small bag and mix with water to achieve a minimum 1:1 ratio (it is ok to have more water than bleach; using more bleach than water may result in tap discoloration).
 - d. Submerge the tap in the bag of bleach solution for two minutes, holding the top of the bag tightly to the nozzle. As you do so, squeeze the bag several times to force the bleach solution up into the tap. If sampling multiple taps, a fresh bleach solution and bag must be used for each tap.
 - e. Flush the tap at full flow for 3-5 minutes to rinse out any remaining bleach and ensure a representative sample is being collected from the distribution system.
- 3. Collect your sample.**
 - a. Wash your hands thoroughly with soap to avoid contaminating your sample.
 - b. After flushing the tap, reduce the water flow so the sample bottle may be filled without splashing.
 - c. Open the sample bottle, being careful not to touch the inside of the bottle or cap. Do not lay the cap down. Doing so may result in a false positive.
 - d. Fill the bottle to above the line indicated on the bottle, about ½" from the mouth of the bottle. Immediately recap the sample bottle tightly.
 - e. Do not rinse out or overfill the bottle. Sample bottles contain a sodium thiosulfate preservative in "pill" or powder form to neutralize any residual chlorine.
 - f. If you believe you may have contaminated the sample in any way, discard the bottle and collect a new sample in a new bottle.
- 4. Submit your sample for analysis.**
 - a. Complete the microbiological submission form provided with the sample bottle (and available on our website – www.biosolutionslab.com). The top portion is for billing information. The bottom portion is for sample collection information. We must have the sample date, time, location, sampler name, and sample tap in order to analyze the sample. Include an email address for more prompt reporting.
 - b. Return the sample to the laboratory (10180 Queens Way #6, Chagrin Falls, OH 44023) within 24 hours from the time of collection. Payment is due at time of sample drop-off.
 - c. Samples are accepted Monday-Thursday, 9:00am – 3:00pm. Samples received after 3:00pm may be analyzed the following day. If you are sampling around a federal holiday, it is strongly recommended you contact the laboratory to confirm holiday hours prior to sampling.
- 5. Await your results.** The Total Coliform/E.Coli test requires a 24-hour incubation. You will receive a call the following day with verbal results. A written laboratory report will be sent via email (preferred) or USPS the following business day.