



Lake County

Health Department and
Community Health Center

www.lakecountyil.gov/health

Environmental Laboratory

500 Winchester Rd.

Libertyville, IL 60048

847-377-8030

Steps for collecting water samples for bacteriological analysis:

1. Water samples can only be collected in Lake County Health Department sample bottles. These bottles are processed in special equipment to insure that they are sterile.
2. Select the proper fixture.
 - A. Avoid leaky fixtures and remove any aerators or tap-mounted filters. When you remove the aerator, make sure you remove all parts of the aerator including any rubber washers or gaskets.
 - B. Avoid fixtures with aerators that cannot be removed, as well as those that have hoses attached.
 - C. Fixtures with a shallow bowl (usually bathroom sinks) should also be avoided.
 - D. Do not use an outside faucet unless there are no other available faucets.
 - E. The presence of a water softener does not make a difference in regards to the water sample. If you drink and cook with softened water, sample the softened water. If you have a point-of-use filter (such as a reverse osmosis system), you may wish to collect the sample from an unfiltered location.
3. Open a cold water fixture to a wide open setting and allow the water to run a minimum of five minutes.
 - A. The faucet should not be flamed since many fixtures have plastic parts. Running the water for five minutes should adequately flush the surface of bacteria.
4. Reduce the flow of the fixture to a steady, pencil-width stream to avoid splashing when you fill your bottle. If a steady narrow stream cannot be obtained, select another fixture.

5. Collect the water sample(s).
 - A. **Open the sterilized sample bottle provided by the Lake County Health Department very carefully. Do not touch the rim of the bottle, inside the bottle or inside the bottle lid.** Be careful not to allow the water to splash off your hand or other surfaces into the bottle. Allowing the splashed water to enter the bottle could contaminate the sample. Fill the container completely leaving 1/2 inch of air space between the top of the bottle and the collected water. The laboratory may not be able to perform the test if the container is under filled.
 - B. Complete the laboratory analysis form, including the location where the sample was collected. Also include a specific site address, a mailing address for the results and your home phone number. If you work during the day, please include your work phone number. **A copy of the results can be emailed, faxed, or mailed per your request.**

6. Bringing the samples into the laboratory:
 - A. **Samples will be received: Monday-Thursday between 7:30 AM and 3:30 PM. Samples are not accepted on Friday, Saturday or Sunday.**
 - B. **Samples must be analyzed within 24 hours of collection.** Please plan accordingly because there are no exceptions. The best advice is to collect the sample just before you bring it in. Samples that are collected in advance must be kept refrigerated at temperatures ranging from 35°F to 45°F. **Please put the sample(s) in a cooler with an ice pack for transporting to the lab.**
 - C. There is a charge for analysis of routine water samples brought into the office. The Service Area staff can conduct an inspection of your water well for a fee, which includes a water analysis. Laboratory testing requires 24 to 72 hours to complete. Your sample will be analyzed for coliform bacteria, E. coli bacteria and screened for nitrates. Please consult the laboratory fee schedule if you wish to test for other parameters.