



Instructions for the Collection of Drinking Water Samples for Total Coliform Analyses

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

Please read instructions before proceeding.

- 1) Select the sampling tap
 - a) A tap, such as faucet, or small valve, is preferable. **Do not** sample from hoses or drinking water fountains.
 - b) **Avoid** taps with a leak at the stem or taps with a swivel joint.
 - c) Aerated or screened nozzles may harbor bacteria. The aerator or screen must be removed before collection of the sample.
 - d) Place all carbon filters, sediment filters and water softeners on bypass unless operated by a public water system.
 - e) **Sanitize** the nozzle of the tap with a chlorine solution.
 - i) Use a 5.25% sodium hypochlorite solution, such as Clorox liquid Bleach. Do not use chlorine solutions with special scents. To prepare a sanitizing solution that will contain about 400 mg/L of available chlorine (as hypochlorite) from the 5.25% sodium hypochlorite, add one ounce of bleach to one gallon of water (or 1 tablespoon per half-gallon. Store the mixed solution in a tightly closed screw capped container. The solution should be discarded and remade six months after preparation. Stronger solutions can be used) however, some faucet discoloration may result.
 - ii) Flush the sample tap to water for one minute. Close the valve.
 - iii) Apply the sanitizing solution, prepared in step (i) above to the nozzle. This can be accomplished by either using a spray bottle or a plastic bag.
 - (1) Using a spray bottle, saturate the tap opening with sanitizing solution then wait at least two (2) minutes before proceeding OR
 - (2) Place the bag over the nozzle and hold the top of the bag tightly on the tap. Alternately squeeze and release the bag to flush the solution in and out of the tap. Do this for two minutes. A fresh solution and bag must used to sanitize each tap.
 - f) Flush the tap. The sample to be collected is intended to be representative of the water in the main. The tap must be opened fully and the water run to waste for at least 3-5 minutes to allow for adequate flushing of the piping between the tap and water main.
 - g) Reduce the flow from the tap. This will allow the samples bottle to fill without splashing.
 - h) Remove the cap from the sample bottle.
 - i) Grasp the bottom of the sample bottle.
 - ii) Remove the cap and hold the exterior of the cap between fingers while filling the sample bottle. Take care not to touch the mouth of the bottle or the inside of the cap with fingers or the sample could become contaminated.
 - iii) The bottle must be open only during the collection of the sample.
 - i) Fill the sample bottles.
 - i) Do not rinse the bottle before collecting the sample. Do not remove any “pills” from the bottle. The bottle contains a small amount of sodium thiosulfate to neutralize the chlorine in the water
 - ii) Do not touch the rim or mouth of the bottle during collection of the sample.
 - iii) Do not overflow. Fill the bottle to within ½-1 of the top.
 - j) Immediately recap the sample bottle tightly
 - k) If there are any questions as to whether a sample or bottle has become contaminated during the collection of the sample, the sample must be discarded and a new sample collected in a new sample bottle.
 - l) Deliver the sample to the laboratory as soon as possible. The laboratory must receive the sample so that analysis can be completed (incubation initiated) within 30 hours after collection. Allow the laboratory adequate time to analyze the sample. Certified laboratories will not test samples 30 hours old because the results will be invalid and the laboratory risks loss of certification.
 - m) Additional information
 - i) A sample identification slip (may use microbiological SSR form) is supplied with each sample bottle. The collection portion of the form is to be filled out in a legible manner using indelible pen, rubber stamp or typewriter. Do not use a fountain pen or other pens having water-soluble ink.
 - ii) Samples must be collected in bottles supplied by the certified laboratory performing the analyses. Bottles may be used from other certified laboratories provided the sampling bottle-supplying laboratory furnishes records of sample bottle sterility tests.
 - iii) Samples must be accompanied by a properly completed sample identification slips. Sample identification slips that have not been properly completed as to name of the water supply, address, date and time of collection, and signature of collector will not be accepted for bacteriological examination.

Results of the test will not be available for 24 hours after giving sample to laboratory.

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