Tarrant County Public Health / North Texas Regional Laboratory
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FECAL COLIFORM TESTING COLLECTION INSTRUCTIONS

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FIRST – FIND THE PROPER LOCATION!

- Raw Water supply: In collecting samples directly from a river, stream, lake, reservoir, spring, or shallow well, obtain samples representative of the water that is the source of supply to consumers. It is undesirable to take samples too near the bank or too far from the point of drawoff, or at the depth above or below the point of drawoff.
- Surface Waters: To monitor stream and lake water quality, establish sampling locations at critical sites. Sampling frequency may be seasonal for recreational waters, daily for water supply intakes, or hourly where waste treatment control is erratic.
- Bathing Beaches: Sampling locations for recreational areas should reflect water quality within the entire recreational zone. Include sites from upstream peripheral areas and locations adjacent to drains or natural contours that would discharge storm water collections or septic wastes. Collect samples in the swimming area from a uniform depth of approximately 1 meter. Relate sampling frequency to peak bathing periods, which generally occur in the afternoon.
- Swimming Pools: Collect a sample from each pool (where you have a big pool and a baby pool, or if there are 2 or more pools at the same location). Rotate your sampling points (shallow, deep, middle, inlet, outlet) on subsequent testing. Collect samples where depth is approximately 1 meter.

SECOND – SAMPLE CAREFULLY!

- *Bodies of water other than swimming pools:* Take samples from a river, stream, lake, or reservoir by holding the sterile sampling bottle near its base and plunging it, neck downward, below the surface. Turn bottle until neck points slightly upward and mouth is directed toward the current. If there is no current, as in the case of a reservoir, create a current artificially by pushing bottle forward horizontally in a direction away from the body. When sampling from a boat, obtain samples from the upstream side of the boat. If it is not possible to collect samples from these situations in this way, attach a weight to the base of the bottle and lower it into the water. In any case, take care to avoid contact with the bank or bottom of the body of water; otherwise, water fouling may occur.
- *Swimming pools:* For swimming pools, carefully remove the cap of the sterile sample bottle and hold the bottle near its base at an angle of 45°. Plunge the bottle vertically into the water approximately 1 foot to fill, while making sure that the dechlorinating agent (powder or pill found in the sample bottle) is not washed out. The sample will be unsuitable for analysis and rejected if any chlorine residual is detected; therefore, it is very important to collect the sample properly.
- For all samples, make sure you collect 120 ml of sample. There is a 120 ml fill line marked on the bottle for this purpose. However, do not overfill the bottle. You must leave visible air space in the bottle (at least 2.5 cm) to aid mixing by shaking. If the bottle is overfilled, pour off any excess immediately after collection. Immediately after collection, label each sample with appropriate identifying information (use the label provided by the lab), place the sample(s) in ice, and transport to the laboratory for testing.

THIRD – GET IT TO THE LAB IN A HURRY!

- Use the "Total Coliform and E. coli Enumeration Submission/Report Form" to request a fecal coliform analysis. DO NOT USE the "Drinking Water Coliform Test Request" form. On the "Water Source" portion of the form, be sure to indicate the type of water being submitted. Use the "Other" section and describe the sample if you are unsure. Fill out your portion of the form completely.
- Bring the sample and submission form to the Tarrant County Public Health Laboratory.
- *Your sample MUST arrive in the lab within 6 hour of collection*. If the time elapsed between collection and arrival is > 6 hours, your sample will be rejected. Also if samples are not received in ice, they will be rejected.
- Routine testing is performed Monday through Thursday. Samples must be received in the laboratory by 2:00 p.m.
- The fee for a Fecal Coliform Analysis is $25.00 per sample. **There will be an additional weekend service charge of $10.00/sample for samples brought in on Friday or the day before a holiday.**

FOURTH – KNOW WHAT TO EXPECT!

- Test results are available 48 hours after submission.
- The lab will report the results to you on the form you completed by the delivery method you selected (mail, email, fax).
- The report will include the following information:
  1. Whether Total Coliform and *Escherichia coli* are Present or Absent
  2. And the Most Probable Number for Total Coliform and *Escherichia coli* organisms found in the sample submitted.

AND FINALLY – WHAT TO DO IF . . .

- Your sample is UNSUITABLE FOR ANALYSIS – If the report returned to you from the lab indicates a problem with your sampling . . . retrace the proper steps for sampling. If you carefully follow the guidelines for proper sampling, you can avoid most reasons for an unsuitable sample. Please call the lab for more information if further explanation is needed.