



Coliform Bacteria Testing in Drinking Water

What are Coliforms?

Coliforms are bacteria found in the stomach, intestines, and wastes of animals and humans. Coliforms are also found in plants and in the soil.

Since there are numerous disease-causing organisms that can be found in contaminated water, it is impossible to test for all of them. However, Water Laboratories certified in microbiological analysis of water samples can identify the presence of disease-causing organisms in water by testing for Coliform bacteria which is known as an "INDICATOR" organism. Basically, testing for Coliform bacteria can be a relative indication on whether or not other disease-causing organisms exist in your drinking water.

What is a Total Coliform/E. coli Test?

Total Coliform & E. coli Bacteriological Water Test is the simplest, reliable method to test your water for bacterial contamination.

As stated above, Total Coliforms are bacteria that live in the soil. They can be found in water and in animal and/or human wastes. *E. coli* is a subgroup of the Fecal Coliform group of bacteria, but these types of bacteria cannot be found living and growing in the general environment. With this being said, *E. coli* is recognized as a form of Coliform bacteria that is the best "INDICATOR" of fecal waste contamination and possibly the presence of other disease-causing organisms.

What if you suspect that your drinking water is contaminated?

Erwin Utilities Water Laboratory analysts can provide you with water sampling instructions and the necessary supplies to have your drinking water tested. Other guidance documents about shock chlorination and filtration/disinfection systems can also be provided to you.

If you are an Erwin Utilities' Water Customer (User of City Water) and suspect your drinking water is contaminated, then you can request to have your drinking water tested free of charge. If you are a Non-Erwin Utilities water customer with a private well or spring water source, then you can have your water tested for a fee.

Bacteriological testing of your drinking water can be performed on **MONDAY - FRIDAY from 6:00 A.M. to 4:00 P.M.**

Water test results of your drinking water can be obtained the next day via telephone, fax, email, mail, or in-person.

Note: Customers who bring their water samples to the Laboratory on Friday will not receive their results until Monday.

Two Different Types of Total Coliform/E. coli Water Tests

- **PRESENCE/ABSENCE:** This test will let you know if you have Total Coliform and/or *E. coli* bacteria in your drinking water.
- **MOST PROBABLE NUMBER (MPN):** This test will let you know if you have Total Coliform and/or *E. coli* bacteria and how contaminated your drinking water is per 100mL of your water sample. This test will provide you a numerical value.

Bacteriological Water Test Fees: (Exact Cash or Checks Made Payable to "Erwin Utilities")

- **PRESENCE/ABSENCE: \$25.00**
- **MOST PROBABLE NUMBER (MPN): \$30.00**
 - (MPN Tests are typically required for Mortgage Refinance Loans, Home Purchases with Private Well or Spring Water Sources, Bed & Breakfast, or for Foster Care Eligibility Applications with the Foster Parent/Guardian's residence having a Private Well or Spring Water Source).

If you should have any questions about water testing, you can call 423-743-1835 or visit the Water Laboratory at 199 N. Industrial Drive in Erwin, TN.