

Protect Yourself from Coliform Bacteria in Well Water

Coliform Bacteria

are a group of microorganisms commonly found in soil, surface water, and on plants. They are also present in the intestines of animals and humans. Coliform bacteria that are washed into the ground by rain are usually filtered out as the water goes through the soil and into groundwater systems. However, poorly constructed, cracked or unsealed wells can provide a path for coliform bacteria to enter groundwater and to contaminate your drinking water.



Why should I worry?

Most coliform bacteria will not likely cause illness. However, these bacteria are used as indicators in water tests because their presence indicates that disease-causing organisms (pathogens) could also be in the water. The presence of some types of coliform bacteria in the water signal the presence of feces or sewage waste. Feces and sewage wastes are usually the source of the disease-causing organisms.

The following are some disease-causing organisms or pathogens that could be present in your water:

- Bacteria that cause diarrhea and vomiting,
- Protozoa that cause dysentery,
- Viruses that cause polio and hepatitis, and
- Helminths, such as roundworms and tapeworms, that cause chronic diarrhea.

If you think you might be sick from disease-causing organisms in your well water, contact your doctor and show him/her your water test results.

Children and the elderly are at a higher risk of the harmful health effects of disease-causing organisms in drinking water.

Testing for coliform bacteria in your well water

Testing for all possible disease causing organisms is complex, time consuming and expensive. Usually, in order to determine the water quality of your well, testing is done for three different groups of coliform bacteria; each has a different level of risk to human health.

Total coliform bacteria are commonly found in the environment (For example, soil or plants) and are generally harmless.

Fecal coliform bacteria are a sub-group of total coliform bacteria. They appear in great quantities in the intestines and feces of people and animals. The presence of these bacteria indicates that your well water is contaminated with feces or sewage, and it has the potential to cause disease.

Escherichia coli is a sub-group of the fecal coliform group. These kinds of bacteria are found in great quantities in the intestines of people and warm-blooded animals. Some strains, however, can cause illness. The presence of this organism indicates fecal contamination of your well and a high risk for illness from disease-causing organisms.

You should test your well for coliform bacteria every year.

(continued)

If your water shows the presence of coliform bacteria, fecal coliform or E. coli:

- Do not drink the water. Get bottled water, or
- Boil the water for 1 minute before drinking or cooking with it.
- Disinfect your well. You may want to contact a well professional to disinfect or chlorinate your well, or contact the environmental health program at your local health department for instructions on how to do it yourself.
- Re-sample and re-test your well water after chlorinating it.

Additional Information:

Coliform Bacteria:

www.epa.gov/OGWDW/hfacts.html

How to disinfect your water and your well:

www.deh.enr.state.nc.us/welldisinf.htm

www.ncwelldriller.org/documents/DisinfectaWaterWell_rev2007-6.pdf

This fact sheet answers the most frequently asked health questions (FAQs) about coliform bacteria. This information is important because some coliform bacteria have the potential to cause illness. The effects of exposure to a biological contaminant in private well water depend on the dose, duration, how you are exposed, personal traits and habits, and the type of biological contaminant present.

**Protect Yourself from Coliform Bacteria in your Well
Water Fact Sheet – July 2009**

N.C. Department of Health
and Human Services-
Division of Public Health



www.ncdhhs.gov
www.ncpublichealth.com

N.C. DHHS is an equal opportunity employer and provider.

