Water Well Contaminates Coliform Bacteria

Coliform is a broad class of bacteria found in the intestinal tract, and in the feces of humans and other warm blooded animals. Bacteria that cause illness can enter a water well in many ways such as: insecure well cap, recent work done on the well, standing water next to the well, abandoned wells, or onsite wastewater treatment system/animal waste close to the well. Testing for bacteria and properly disinfecting wells when bacteria is found are important aspects in maintaining a water well.

- Testing for coliform bacteria will aid in finding whether your water supply may be contaminated with infectious organisms, but will not be conclusive as to the exact form of bacteria. Specific disease-producing organisms aren’t easily identified, but because coliform is, it can be an indicator of the presence of bacteria in the water.

- Some of the coliform indicators occur naturally in the intestines of humans as well as other warm-blooded animals and are discharged in large numbers in human and animal waste. Others can occur naturally in surface water and in topsoil.

- Unsatisfactory results (will be a positive if the number is greater than 1 milligram per liter) of coliform may suggest that there could have been an error in the water collection technique, contaminated water sample bottle, possible contamination of the pump or plumbing fittings, the well may not have been properly constructed, or there is a natural contamination present.

- The local health department or licensed water well contractor should be consulted if the sample is unsatisfactory. The well would then need to be disinfected and possibly be inspected to determine if it has been properly constructed and to determine if there are any points of contamination.

- Until a satisfactory sample is obtained, the water should NOT be used for drinking or cooking UNLESS brought to a rolling boil for at least one minute.

- To be considered satisfactory levels for coliform, the levels need to be less than 1 milligram per liter according to the United States Environmental Protection Agency standards.

- Common treatment options for infected wells include: chemically treating the well with chlorine (bleach) also called shocking the well; filtration, and ultraviolet irradiation.

As long as the coliform levels are under 1 milligram per liter, the water is safe for drinking. However, annual testing of the well should be performed to assure the well is providing a safe supply of water.