Your well has Coliform bacteria, now what??

DON'T - Panic.
DON'T - Rush into expensive repairs or water treatment.
DON'T - Drink the water without treating it until you find and fix the problem.
DO - Figure out the reason/reasons, **Fix** the problem, **Disinfect**, and **Retest** for coliform before drinking the water.

What is Coliform bacteria?

Coliform is a large group with many kinds of bacteria. Most Coliform bacteria are harmless. Various types of Coliform live in the soil and even on surfaces in your home, but they do not occur naturally in groundwater. If Coliform bacteria (sometimes reported as Total Coliform) are found in your well water, it is an indication that disease-causing bacteria could get in the same way.

If any Coliform bacteria are found, the lab does a second test to look for the special sub-group of Coliform that live in the guts of mammals and birds. This test is for E. coli. These bacteria indicate that your well water has come into contact with animal waste—a very high risk for transmitting disease.

Treating a well for bacteria contamination?

A chlorine solution, like Hylex or Chlorox bleach, is the simplest and most effective agent for disinfecting a well, pump, storage tank or piping system. Liquid household bleach is the most commonly available source of chlorine. Follow the Minnesota Department of Health (MDH) Well Disinfection instructions found at the below website or on our website awlab.com.

https://www.health.state.mn.us/communities/environment/water/wells/waterquality/disinfection.html

Some common reasons for Coliform bacteria in well water samples are described below:

1. Problems with the top of the well. Is the cap loose? Are there any open holes in the cap? Are there cracks or holes in the well pipe? If you find any of these problems, this could be the source of bacteria. **Fix** the problem, then **disinfect** the well. **Test** again before using the water.

2. Work was done recently on the well, pump, or plumbing system. If the water system was not disinfected after the work, this may be your source of bacteria. **Disinfect** your water system and **test** the water again.

3. Water standing next to the well. If the area around the well pipe (casing) gets wet, this water may be causing your problem. Make sure that runoff water does not reach the well. The presence of bacteria also means that there may be problems with the grout seal around the well pipe. If you can't find any other explanation for the bacteria, contact a well contractor to advise you on repairing the grout seal. Once the problem is fixed, **disinfect** the well and **test** the water again.

4. The sample was contaminated in the collection process. Common problems include: (a) A hose, aerator screen, filter or other attachment on the faucet. (b) Accidentally touching the inside of the lid or the top of the bottle. (c) Not running the water 3- 5 minutes before collecting it. Carefully collect another sample and retest. Use rubbing alcohol on a clean paper towel to wipe the faucet before letting the water run for 3-5 minutes.

5. Old, unused wells. Old wells in the area may be draining bacteria into the groundwater. Check with a well contractor about sealing up unused wells.

6. Septic system or animal waste close to the well. This is a problem only if E. coli was found. Check for other problems described above. Bacteria need a way to get into the water system which needs to be fixed.

If you have any questions, please feel free to call us anytime at 218-829-7974.