Coliform bacteria information

For more information, contact:
Thurston County Public Health Department
Environmental Health Division, (360) 867-2673
http://www.co.thurston.wa.us/health/ehadm
TDD Line for hearing impaired, (360) 867-2603

Why do we test for coliform bacteria?
Coliform bacteria come from many natural sources, including human and animal feces. Feces can carry organisms called pathogens and spread disease. When pathogens contaminate a water supply, they can cause hepatitis, giardiasis, dysentery and many other water-borne illnesses. The presence of coliform bacteria in drinking water suggests the presence of pathogens and a potential health risk.

Why not test for the specific pathogens that cause water-borne illnesses?
Testing for all the different types of pathogens (bacteria, viruses and protozoa) is extremely expensive, time-consuming and impractical. Testing for coliform is relatively simple, inexpensive and a good indicator of the presence of pathogens in drinking water.

What if my test results indicate that coliform is present?
If your water has coliform bacteria in it, the laboratory should test your sample for fecal coliform (which includes E. coli--a type of fecal coliform). Most certified laboratories will do a follow-up test automatically.

The presence of fecal coliform in your water poses an even greater health risk than other forms of bacteriological contamination. Although fecal coliform does not always cause illness, its presence increases the possibility that disease-causing organisms are in your water.

What should I do next?
Look for problems in your well’s construction and in the area around your well. Many unsatisfactory water samples result from poor well construction or maintenance. A properly constructed well should include the following:

- The wellhead should be fitted with a properly installed sanitary seal and a screened “gooseneck” vent.
- Holes though which wires pass should be sealed.

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- The well casing should extend at least 6 inches above the ground.
- The area between the well casing and the ground (the annular space) should be grouted or sealed.

Look for the following in the area around your well:

- Your well should be isolated from sources of contamination, such as on-site sewage (septic) systems, animal pens, manure piles and gardens or fields where pesticides are used.
- Your well house or building should not be used to store chemicals, paint, pesticides or fertilizers.
- If possible, your well house should have a concrete floor.

After correcting any problems with your well’s construction and checking the area around your well, follow the directions for disinfecting your well in the Thurston County Health Department’s fact sheet on disinfection.