



Understanding Your Drinking Water Test Results

Bacteriological Water Testing

The Provincial Laboratory of Public Health (ProvLab) tests private drinking water systems for indicator bacteria (total coliforms and *E. coli* bacteria) that may show if the water is contaminated with sewage or manure. However, the ProvLab cannot test water for every type of harmful germ. For example, they don't check for viruses (e.g., hepatitis) or protozoa (e.g., *Giardia*).

What are coliforms?

Coliforms are a group of bacteria that can be found almost everywhere (e.g., soil, vegetation, sewage, manure).

Your water sample may have coliforms if:

- The sample wasn't collected properly
- surface water gets into the well (e.g. cracked casing, seal around well is not sound, well cap is missing or loose)
- The well is near a ponding surface or other source of surface water
- Surface water gets into the cistern (e.g.: cracked lid or collar, missing seal or lid)
- There are problems with the distribution system

What are *E. coli*?

E. coli are bacteria that humans and some types of animals have in their intestines.

Your water sample may have *E. coli* if:

- Your drinking water has been contaminated by sewage or manure.

The first sample sent by the Community Health Representative (CHR) or Community- Based Drinking Water Monitor (CBWM) to the ProvLab will be tested for Total Coliforms and E.coli, but it won't tell you the number of bacteria. Follow-up sample results will tell you the number of total coliforms and/or E.coli present in the sample.



RESULT	WHAT IT MEANS
Total Coliforms And <i>E.coli</i> <u>ABSENT/NIL</u>	- The water tested was SATISFACTORY because indicator bacteria were NOT detected in the water sample and showed no evidence of being contaminated at the time the sample was taken. - The water is safe to drink if other issues with the site have not been reported. - Results from one water sample don't reflect the overall health risk of the cistern/well which should still be monitored and maintained properly.
Total Coliforms <u>PRESENT</u> And <i>E.coli</i> <u>ABSENT</u>	- The water tested is DOUBTFUL - No <i>E.coli</i> was detected but other coliform bacteria are present. This water supply must be resampled by the CHR or CBWM to confirm the bacteriological water quality.
<i>E. coli</i> <u>PRESENT</u> Or Two consecutive samples with Total Coliforms <u>PRESENT</u>	- The water tested was UNSATISFACTORY because coliforms or <i>E.coli</i> bacteria were detected in the water sample. This water is contaminated and should not be consumed as is. Use an alternative, known safe water supply, or boil this water before consuming. - An Advisory will be delivered to the household by the CHR or CBWM. Corrective action(s) must be taken by removing the source of contamination. - The Band designate and/or home occupant must carry out repairs of the cistern or well if necessary. - The Band designate and/or home occupant must shock chlorinate the well or clean and disinfect the cistern. - The CHR or CBWM must take two consecutive samples to assess the water supplies after shock chlorination. The occupant or home owner is to contact the health centre to arrange for an additional sample after three to four months to ensure that there has been no recontamination.

Contact Information:
Environmental Public Health Services
First Nations and Inuit Health Branch,
Alberta Region
Edmonton Phone: (780) 495-2712
Calgary Phone: (403) 299-3939



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