

How to Interpret Your Laboratory Results

Total Coliforms	E.coli	What it Means
0	0	No significant evidence of bacterial contamination. Safe for drinking. Repeat samples may not show exactly the same results because bacteria are not distributed uniformly in water. Contamination tends to enter intermittently and numbers can change during sample transit time.
1 → 5	0	Significant evidence of bacterial contamination. Doubtful for a single sample, but safe for drinking if condition remains stable based on 3 samples and supply is protected and located at least 30.5 m (100 ft.) from any source of human or animal wastes.
6 → >80	0	Unsafe to drink. Contamination is not likely to be of sewage origin unless far removed from the water source or unless there has been a delay in receipt of sample. Common with new wells before disinfection and shallow dug wells which are not properly sealed.
1 → >80	1 → 80	Unsafe to drink. Pollution source may be some distance from the water source, or diluted with volumes of pure water, or the sample may not have been received within 48 hours of being taken. Samples older than 48 hours cannot provide reliable results.
>80	>80	Unsafe to drink. This water is contaminated and should not be used for drinking under any circumstances. Do not attempt to apply these standards and interpretations to surface waters used for swimming.
EST		Unsafe to drink. Number has been estimated due to some interference with the test. Exact number is not really critical, especially if in excess of limits shown above, for judging safely.
O/G		Unsafe to drink. Doubtful condition and not recommended for drinking. No coliform bacteria could be detected because of "overgrowth" by other bacteria. This condition frequently occurs with new wells, dug wells receiving soil drainage, or wells which have been idle for some time. Collect another sample and identify clearly "REPEAT SAMPLE".

SAFE TO DRINK

Testing Your Drinking Water



Any surface water (lake, river, stream, spring or dug well) is open to contamination by humans and animals. Surface waters are also contaminated by natural runoff and man-made operations (sewage systems, farms). Therefore, no surface water is considered safe (potable) for human consumption unless treated. If your drinking water does not come from a municipal water system, it is important to test it regularly - especially if it hasn't been checked for a while or whenever you detect any changes to its appearance, taste or smell.

The Northwestern Health Unit
serves as a drop-off point
for water samples being sent to
the Public Health Laboratory
in Thunder Bay,
for a nominal fee of \$2.00.



**Northwestern
Health Unit**

www.nwhu.on.ca

1-800-830-5978

SAFE TO DRINK TIP

If test results show that your water is unsafe to drink, follow these guidelines until your drinking water supply is safe again:

- Bring water to a rolling boil for 1 minute, OR
- Mix ¼ tsp. (1.25 ml) of liquid household bleach (such as Javex) with 1 gallon (4.5 liters) of water and let stand for 30 minutes, OR
- Use commercially bottled water.

Instructions for Collecting the Sample

- Do not touch the inside of the sample bottle or lid during the sampling process.
- Do not rinse out the bottle before sampling. The granular material in the bottle (Sodium Thiosulphate) is intended to be there. **This material may cause a reaction if ingested or inhaled, therefore bottles should not be handled by children.**
- Remove the screen from the tap.
- Clean the tap nozzle thoroughly.
- Run tap water for 2 to 3 minutes. Be careful not to touch the tap with your fingers during the sampling procedure.
- With the screen still removed, allow the water to run for a few seconds and fill the sample bottle to the indicator line, taking care to avoid splashing.
- Replace the screen.
- Carefully read and complete the data sheet. Necessary information includes sample location, date sample taken, return address and phone number.
- Return the water bottles to the Northwestern Health Unit. Keep the samples under refrigeration until delivery.



What are Coliforms?

TOTAL COLIFORMS:

- This group of bacteria is always present in animal wastes and is also found in soil and on vegetation.
- The presence of these bacteria in your well is usually the result of surface water infiltration.

Recommendations for Taking Samples

- A minimum of 3 samples taken 1 to 3 weeks apart is required as the stability of a supply cannot be established from a single sample.
- The supply must be protected from surface water contamination (e.g. water tight construction of the well).
- Laboratory Services, Ministry of Health, does not accept samples from untreated surface sources such as lakes, streams and ponds since these sources are subject to intermittent pollution.
- The water supply must be located a safe distance from sources of human and animal waste such as sewage systems and manure piles.
- If the test results of the three samples indicate a bacteriologically safe supply, the supply needs to be tested only once or twice a year thereafter. Additional samples should be submitted if there has been some change in source conditions, e.g. flooding, repairs to the well or any change in the taste, smell or appearance of the water.

Should I be worried about E. coli?

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- Yes, E.coli are disease-causing bacteria.
- This bacteria is found only in the stomachs of people and animals.
- The presence of E. coli bacteria in your well is usually the result of recent sewage contamination from a nearby source.