



WATER TALK

BE WELL AWARE:

Test your well water



Your well water should be free of microorganisms, such as bacteria, viruses or parasites that may cause disease, and from chemicals at levels that may be a risk to your health. If you have a private well, you should have the water tested to see if there are any problems. Your provincial or territorial drinking water authority or your local public health unit can help you find an accredited laboratory to do the tests. Your most important tests look for certain bacteria that indicate whether there may be disease-causing microorganisms in your water.

Follow all instructions from the accredited laboratory on:

- ▶ completing and submitting the test forms
- ▶ collecting, labeling and storing the sample
- ▶ handling and transporting the sample to the laboratory

The best time to sample your well water is when there is the greatest chance of contamination:

- ▶ early spring just after the thaw
- ▶ in the fall rainy season
- ▶ after a long dry spell or drought
- ▶ after heavy rains, floods
- ▶ after the well has not been used for a long period of time.

Check your well record to find out how deep your well is and about the geology in your area. Shallow wells or wells that have only a thin layer of soil over rock can become contaminated more easily. Water in these wells needs to be tested more often.

If you or a family member has had a gastrointestinal illness and suspect that it might be related to drinking your well water, speak to your doctor and local health unit and have your water tested.

What to test in your well water

Test for:	<i>Bacteria: E. coli</i> and total coliform bacteria
Where it comes from:	<ul style="list-style-type: none"> ▶ <i>E.coli</i> comes from human and animal feces; possible sources include nearby septic systems, manure storage or spreading, feedlots. ▶ Total coliform bacteria can be found in soil, on vegetation, and in feces; they may be carried to your well with surface water, rain or melting snow.
How often:	Every 6 months
Acceptable level:	No <i>E.coli</i> in a 100 ml sample of water No total coliforms in a 100 ml sample of water
What your test results mean:	<p>If your well water sample contains <u>any</u> <i>E. coli</i>, the water is not safe to drink.</p> <p>If your well water sample contains <u>any</u> total coliform bacteria, your water might not be safe to drink; more information is needed.</p>
What to do:	<p>If <i>E.coli</i> or total coliform bacteria are found in your well water sample:</p> <ul style="list-style-type: none"> ▶ Collect and test another sample as soon as possible to confirm whether your water is contaminated with <i>E. coli</i>, total coliforms, or both. ▶ If the second test confirms that your well water is contaminated with <i>E. coli</i>, total coliforms, or both, follow the <u>corrective actions</u> in the <i>Be Well Aware – Protect and clean your well factsheet</i>. <p>If there is <i>E. coli</i> in your well water sample:</p> <ul style="list-style-type: none"> ▶ Boil any water used for drinking, cooking or teeth brushing or use another safe source of water until test results show that the water is safe to drink. <p>If there is total coliform bacteria in your well water sample:</p> <ul style="list-style-type: none"> ▶ You can continue to use your drinking water while you wait for further test results.

Some chemicals that can affect health may also be found in your well water. The most common chemicals that can affect your health and may be found in Canadian well water are:

- ▶ Nitrate and nitrite
- ▶ Manganese
- ▶ Arsenic
- ▶ Uranium
- ▶ Lead

You should contact your local public health unit to find out whether you should test for these or other chemicals.

There are also general water quality tests that will help you know if there are conditions that may cause problems with your well, and what type of water treatment device you might need. Test for:

- ▶ Alkalinity
- ▶ Hardness
- ▶ Ammonia
- ▶ pH
- ▶ Chloride
- ▶ Total dissolved solids
- ▶ Sodium
- ▶ Dissolved organic carbon
- ▶ Sulphate
- ▶ Iron



It is a good idea to test for general water quality every 2 years, and more often if you notice changes in taste, smell or colour or in land uses or activities near your well. Many laboratories offer water quality analysis packages (analysis for several substances) at a better price than analysis of individual substances.

The acceptable levels for these parameters are not based on health. They are called aesthetic objectives because they may affect the taste, smell, or colour of water, or can interfere with the operation of your plumbing or appliances. Your laboratory can give you the aesthetic objectives for your province or territory so that you can compare your test results.

If any of these parameters are found to be above their aesthetic objective, you may safely continue to drink and use your water. You may choose to treat your water to prevent common problems such as staining or scaling, or to improve the taste or smell of your water.



Need more information?

For more information on drinking water quality:

Visit Health Canada's Water Quality website

www.canada.ca/en/health-canada/topics/health-environment/water-quality-health.html

Email: hc.water-eau.sc@canada.ca

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