Your Well Water

A Safety Checklist

Many New Brunswickers depend on drilled, dug, or spring-fed domestic wells for drinking water, along with other household uses, and so it's important to know what you can do to ensure the safety of your well water supply…

New Brunswick
Environment and Local Government

Maintaining Your Well

Wells are supplied by aquifers, or underground reserves, which are generally protected by the overlying soil. However, well water can be affected by improperly maintained or damaged well casings. That's why regular maintenance is so important.

The checklist:

- Periodically inspect parts of the well for problems such as:
  - cracked, corroded, or damaged well casings, pumps, or pipes
  - broken or missing well cap
- Slope the area around the well to drain surface runoff away from the well.
- Disinfect drinking water wells at least once per year, or after long periods of non-use with chlorine or bleach. (Instructional brochure available from the Department of the Environment and Local Government.)
- Have the well tested once a year for coliform bacteria. Tests for compounds such as nitrates, arsenic, and fluoride should be conducted at least every two years.
- Any new well construction, modification, or decommissioning of must be carried out by a licensed water well contractor.
- Avoid mixing or using pesticides, fertilizers, degreasers, fuels, and other pollutants near the well, and never dispose of hazardous materials in a septic system.
- Do not dispose of wastes in dry wells or in abandoned wells.
- Avoid housing pets near your well and keep the area free of pet waste.
- Do not cut off the well casing below the land surface, and if this has already occurred, have the casing extended to 30 cm above ground level.

- Pump and inspect septic systems as often as recommended by the Department of Health and Wellness.

Testing Your Well Water

Well water should be tested for the presence of bacteria regularly and for chemical contamination if it is suspected. In addition to regular tests, well water should be tested immediately if there is any change in its clarity, colour, odour or taste, or if there has been a significant change or new development on the surrounding land. If at any time, you have any doubt as to the safety of your private water supply, you should have it tested as soon as possible. Through regular assessment and testing of drinking water, the safety of your well water can be verified.

The checklist:

- Sample your well water when the probability of contamination is greatest: early spring just after the thaw, after an extended dry spell, following heavy rains or after lengthy periods of non-use.
- Carefully follow all instructions for taking a sample and use an accredited or certified bacteria testing laboratory to have the sample analyzed.
- Seek advice for both testing and any corrective action from the Departments of Environment and Local Government, or Health and Wellness.

How To Collect a Well Water Sample for Bacteria Testing

The sampling kit provided by the Department of Environment and Local Government contains a small clear plastic bottle that holds approximately 100mL of water. There will also be information to fill out and submit with your sample. *Please note that sampling kits are also available for testing the presence of chemicals in well water.*

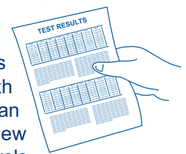
The Checklist:

- Read the sampling instructions carefully before taking a sample.
- Remove the tap screen or any other devices attached to the tap spout.
- Turn on the cold water tap in your kitchen or bathroom and run the water for at least 5 minutes to flush the lines. Be careful not to touch the faucet where the water is coming out.

- Reduce the flow of water to about 500mL (2 cups) per minute. (If needed, use a measuring cup to help determine the rate of flow.)
- The clear plastic bottle is sterile when you receive it. To avoid contaminating the bottle and your sample, do not touch the mouth of the bottle or inside of the cap. The bottle also contains a preservative to help maintain the sample, so do not rinse the bottle out before filling it.
- Fill the bottle directly from, but not touching the faucet to just above the 100mL mark, and place the cap securely on the bottle.
- Keep the sample cool and return it to the same place you received your kit within 24 hours of when you took the sample.
- Fill out the forms to be submitted with your sample, including your full name, address and your Property Identification Number (PID) which is on your property tax form, or you can call Service New Brunswick at 1-888-762-8600 to find out your PID.

The Results of Your Well Water Test for Bacteria

Well water samples analyzed at the Provincial Laboratory are tested for two primary sources of bacteria: total coliforms which occur naturally in soil and in the intestines of humans and animals, and Escherichia coli, or E. coli which are found only in the intestines of humans and animals. The results of your well water test will be sent to you in the mail.



This information tells you what the results were for your well, and what the acceptable levels are for bacteria, under Health Canada's Guidelines for Canadian Drinking Water Quality and New Brunswick's Health Advisory Levels.

To ensure a safe and enjoyable water supply, it is important to learn about the steps you can take to prevent contamination, assess your water quality, and act when there are problems. We're here to help, so please contact us if you have any questions, or require additional information.

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