



3 Main Reasons People Don't Test Their Well Water

They don't know that they should:

Bacteria testing is recommended at least once a year according to public health and environmental authorities. And congratulations, you just took a great first step!

It's inconvenient:

It doesn't have to be. You've already got this simple screening kit as a starting point.

They don't know how:

Not to worry. Test kits generally come with step-by-step directions. Plus, we've included some additional pointers below.

See for yourself!

Testing your water regularly is a great way to know what's in it. The most harmful contaminants in water, like bacteria and other microbes that can make you sick, are generally the ones that can't be seen. In fact, you can't see, taste, or smell many pathogens.



With this simple screening kit, though, you will be able to *quickly screen* for total coliform bacteria that may be present in your drinking water. A total coliform test, like this one, is an indicator of general water quality and provides a preliminary indication of the likelihood that pathogens are in your water.

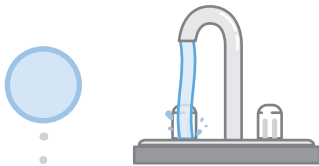
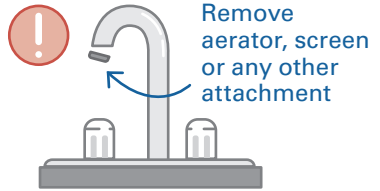
How to take a water sample



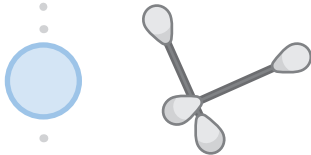
Coliform bacteria are found everywhere, so you'll want to do your best to ensure that any coliforms detected by the test actually came from your tap water and nowhere else. Before you begin, review the manufacturer's instructions on the test bottle. Then follow these additional steps to help prevent any accidental contamination of the sample.

1. Clean your hands.
2. Prepare the faucet.
3. Don't touch anything to the inside of the sample bottle or lid.

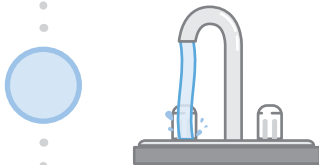
Most people will choose to take the sample from the kitchen faucet. If yours has an aerator, screen, or any other attachment, it will need to be removed before taking the sample. If this is not possible, choose a different inside tap that does not have any of these, like your bathtub.



Run the cold water tap for 2 to 3 minutes.



Remove any debris or bacteria by swabbing the faucet with isopropyl alcohol or a weak bleach solution (10 parts water to 1 part household bleach).



Again, run the cold water tap for 2 to 3 minutes.



Carefully follow the manufacturer's directions on the bottle to collect the sample and interpret the result.

About your result*

- A positive total coliform result can be an indication of surface water infiltration or seepage from a septic system¹.

Generally coliforms are bacteria that are not harmful and are naturally present in the environment. They are used as an indicator that other, potentially harmful, fecal bacteria could be present.

- The presence of total coliform bacteria indicates the relative risk that pathogens have also entered your well water.



Total coliforms negative (purple):

Lower risk of pathogens.



Total coliforms positive (yellow):

Increased risk of pathogens.

- Understand that the sample you just collected is just only a **“snapshot”** of your well’s water quality, and the result only tells you the risk **at the time the sample was taken**. This means the results can’t be relied on to predict the future microbial safety of your well water. The more samples you have tested, the more confident you can be.



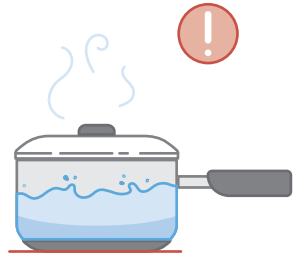
- In addition, a negative result from a screening kit like this only provides limited comfort level. The screening is not fail safe, and if you have any doubts, or would like additional level of comfort consistent with a professional test, you should have the water professionally tested.

*Please note that screening test results are subject to all proper test directions and disclaimers provided by the manufacturer of the test.

What now?

- **Retest**

If you saw a positive coliforms result, it indicates that there is potential for pathogens to be in your water. Confirm the result. Reach out to a local certified lab and/or your local health department to have a sample professionally tested. In the meantime, **boiling the water or using bottled water is advised** until the result is confirmed or the source of contamination has been eliminated.



- **Fix the problem with the well**

There are many reasons that coliforms may be present in a well. Your local state, provincial, and Ground Water Association websites are great places for guidance on proper well maintenance.

- **Consider continuous disinfection**

More frequent water testing will allow you to monitor the risk of pathogens being present and provide reassurance. Continuous disinfection provides additional peace of mind knowing that your water is treated with a proven treatment technique!

One leading treatment option is ultraviolet (UV) disinfection. **UV disinfection** equipment can address bacteria and a range of other microorganisms – including some chlorine-resistant pathogens like Cryptosporidium and Giardia. And UV disinfection equipment does not use chemicals.

In most cases, UV will disinfect without changing the taste or odour of your water. A water treatment professional can help determine the right UV system for you.



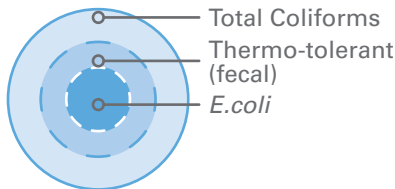
Frequently Asked Questions

1. Is this test the same as a public health or professional bacteria test?

No. In-home screening kits for total coliforms will not be as accurate as laboratory testing.

However, total coliform screening is very commonly used by public health and third party certified laboratories as coliforms are easily and inexpensively detected. In some instances, testing may also include fecal coliforms or *E. coli*. These are more specific indicators of recent fecal contamination.

2. What's the difference between total coliforms, fecal coliforms, and *E. coli*?



Total coliforms are a broad group of bacteria that are always found in fecal matter but can also be found in soil and vegetation. Fecal coliforms are a subgroup that are associated only with human and animal waste. *E. coli* is a specific strain that is only found

in fecal matter, making it the best indicator of fecal contamination.

3. My water sample was coliform positive. Can I just “shock” my well with bleach?

There are many reasons coliform bacteria could be in your sample. If, for example, surface water is getting into your well or the aquifer (source of water for your well) is itself contaminated, shocking alone will not be an effective solution.

4. How does surface water get into a well?

Surface water intrusion can happen in a number of ways. For instance, surface water can get into your well if the well cap is missing or damaged. Or, seepage may occur through cracks or holes in the well casing or along the outside of the well casing for wells constructed at a time when sealing with grout was not required. Another frequent cause is well flooding from heavy rainfall, hurricanes, or significant snowmelt.

5. Will an in-home screening test tell me if my water is safe to drink?

No. An in-home screening test will give you a quick indication of the risk of microbial contamination in your well water. Testing your water through your public health agency or other certified lab is always best.

In addition your public health agency can help you to understand what other water testing is recommended for your local area as other natural and man-made contaminants can impact your health.

Resources:

- 1. Health Canada: What's in Your Well?**
– A Guide to Well Water Treatment and Maintenance
- 2. Centres for Disease Control and Prevention:**
Private Ground Water Wells
- 3. United States Environmental Protection Agency:**
Private Drinking Water Wells
- 4. www.wellowner.org**

* Results provide screening ranges only, under typical conditions using standard presence / absence growth media techniques to give results (USEPA Compliant - Standard Methods 9221 D), and are subject to all proper test directions and disclaimers provided by the manufacturer of the test. Actual results may vary, and VIQUA and its partners, resellers, installers, the test manufacturer, and the like are not responsible for use of the above test, the test results, any treatment decisions, or for any water use; or for any damages arising therefrom including direct, special, treble, incidental, and/or consequential damages. VIQUA equipment is subject to the express warranties for the equipment supplied at the time of purchase, and VIQUA's Standard Terms and Conditions of sale for such equipment.