

Bacteria in Well Water

Why test for bacteria?

Testing your well water annually for total coliform bacteria is a good practice to ensure that your water supply is safe. Coliform bacteria are indicators of the microbiological quality of your well water. They live in soil, decaying plant material, and the intestines of humans and animals. If they're in your water, your well may be contaminated with other microorganisms that can cause disease.

When should I test the well water?

You should sample your well for total coliform bacteria:

- When you purchase a new home (some mortgage lenders require the total coliform test)
- Once a year to monitor water quality
- When you repair an existing well or drill a new well
- If recent floodwaters or runoff covered the wellhead
- If members of your household have recurring gastrointestinal illnesses such as dysentery

Sampling your well water for coliform bacteria is simple and inexpensive. Contact a [State-Certified Laboratory](#) or the Colorado Department of Public Health and Environment's (CDPHE) [Laboratory Services Division](#) for their costs and sampling procedures. When you place the order, the laboratory will send you a sterilized bottle to collect the sample. The sample should be

collected from a tap inside such as a kitchen sink or bathtub. Be certain to follow the laboratory's instructions carefully so you do not accidentally contaminate the sample.



Collecting a sample

Some things to remember to avoid contamination when collecting the sample:

- Remove the aerator on the faucet before collecting the sample
- Use the cold water tap and flush the line before filling the bottle
- Do not touch the rim of the bottle
- Do not place the lid on any surface
- Return the filled bottle to the laboratory as soon as possible
- Keep the bottle cool during transit to the laboratory

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Test results

Ideally, the test should show that there are no bacteria present in the water. If this is the case, the laboratory result will read “absent.” Some laboratories may show results differently. If you have any questions, contact the laboratory for clarification.

If the test result comes back positive or “present,” check the integrity of the well casing and grout seal around the borehole. The ground surrounding the wellhead should be level and free of crevices or gaps. Water and contaminants can seep into the well from the surface if the casing, grout seal or ground is cracked. Inspect the well cap to check that it is properly sealed to prevent insects or debris from entering the well. A positive test result may call for a follow up test for *Escherichia coli* bacteria, a type of coliform bacteria that indicates contamination from animal or human waste.

Disinfecting the well

For detailed instructions on how to decontaminate a well that has tested positive for bacteria, please refer to the following brochure: [How to Disinfect a Well](#).

- Remember to wear protective clothing when working with bleach
- If there are filters on any household taps, disconnect them before running bleach through the system. Bleach can harm some filters.



Follow up

If follow up laboratory tests confirm contamination, consider contacting a licensed contractor to make repairs or disinfect the well. The Colorado Division of Water Resources (DWR) maintains several lists of currently [Licensed Contractors](#). The lists are conveniently arranged by contractors’ names, cities, companies and license numbers and are updated quarterly by the DWR.

Annual testing for total coliform bacteria is an easy, inexpensive way to monitor the quality of your well water and protect the health of members of your household.

Additional Questions?

For additional questions, contact Adams County Health Department at 303.288.6816.

