

WELL WATER TESTING



AgHealth
Central States
Center for Agricultural
Safety and Health

 University of Nebraska
Medical Center™

THE IMPORTANCE OF TESTING YOUR WELL WATER

More than 43 million Americans use private wells for drinking, bathing, and cooking. The EPA does not regulate private wells. That means **it is up to the owner to ensure their well water is safe to drink**. It is important to test your well once a year to ensure that the water you use in your day-to-day life is safe and free of pollutants.

Private wells rely on groundwater that may be contaminated. If polluted groundwater is consumed, it can cause illness. Groundwater pollution can result from pesticides and fertilizers, runoff from landfills, failed septic tanks and wells, underground fuel tanks, or from livestock runoff. Pollutants can include coliform bacteria, nitrates, pesticides, and fertilizers.

Coliform Bacteria

Coliform bacteria are bacteria found in feces. An example would be E. coli, a type of bacteria that comes from feces (poop) and digestive systems of humans and warm-blooded animals. Bacteria in your well water can lead to short-term and long-term health effects. Symptoms may include diarrhea, vomiting, and fever.

Nitrate

Nitrates are naturally occurring in well water, but high levels can make you sick and can pose a risk to children. Nitrate in your well water can come from wastewater, agricultural runoff, or flooded sewers.

Pesticides & Fertilizers

Pesticides and fertilizers are commonly applied in farmlands, gardens, and lawns and are used in the reduction of pests and weeds. Drinking water contaminated with pesticides and fertilizers has the potential to cause serious health effects.

Sources: (1) Centers for Disease Control and Prevention. (2014, December 16). Private Wells. Centers for Disease Control and Prevention. <https://www.cdc.gov/healthywater/drinking/private/wells/index.html> (2) Centers for Disease Control and Prevention. (2023, February 23). Well testing. Centers for Disease Control and Prevention. <https://www.cdc.gov/healthywater/drinking/private/wells/testing.html#:~:text=When%20to%20have%20your%20well,tes t%20for%20those%20as%20well.> (3) Environmental Protection Agency. (2023, July 3). Contact Information for Certification Programs and Certified Laboratories for Drinking Water. EPA. <https://www.epa.gov/dwlabcert/contact-information-certification-programs-and-certified-laboratories-drinking-water> (4) TCEQ General Information. (2023, June). How to Sample Your Private Well Water for Microbial Contaminants. <https://www.tceq.texas.gov/downloads/drinking-water/preparedness-resources/gi-431.pdf>



TEST YOUR WELL ONCE A YEAR



TO COLLECT A SAMPLE...

It is recommended to test your water at least once a year for coliform bacteria, nitrates, and other contaminants like pesticides and fertilizers. *Test your well immediately if there are known problems with well water in your area, flooding or land disturbances, if you replaced or repaired any part of your well system, or notice a change in water quality like taste, color, or odor.*

The EPA provides a list of laboratories that are able to test your well water on their website. Also, check with your local Public Health department for testing locations. You will receive a lab-provided sterile container and form to submit your well water sample for testing.


- Take the sample that is most representative of the water in your well. For example, an outside faucet and make sure to bypass any carbon filters, sediment filters, and water softeners.
- Avoid taking a sample from a faucet that leaks, as it can introduce contaminants that are not representative of your well sample.
- If you are using an outside tap, disconnect any hoses or attachments before collecting the sample. Lastly, remove all aerators and screens from the faucet.

Where can I have my water tested?

www.epa.gov/safewater/labs
or call 800-426-4791

1. Run your water on high flow for 5-10 minutes to flush and clear the line. You want fresh water for this test. Then turn off your faucet
2. Sterilize the mouth of the faucet. This can be done by spraying a 10% household bleach solution or 70% rubbing alcohol solution. Allow the solution to disinfect the faucet for several minutes.
3. Turn on your faucet and reduce the flow to a slow, steady, spray-less stream. About the thickness of a pencil (1/4 of an inch).
4. Be careful to not touch the inside of the sample container once you open it.
5. Fill the container slightly above the fill line indicated on the container, but not higher than the neck of the bottle. There will be specific instructions provided with your kit.
6. Close and seal the container, make sure it does not leak.
7. Note the date, time, and location you collected the sample on the bottle. Some labs provide labels to fill out or you can write directly on the bottle.
8. Fill out any forms attached to your sampling kit.

GET IN TOUCH

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