

IOWA DEPARTMENT OF NATURAL RESOURCES

LEADING IOWANS IN CARING FOR OUR NATURAL RESOURCES

Iowa Private Well Program

How to sample your well water

Water testing is an important part of using a private water supply well. Unless you regularly test your water supply, you won't know if the water is safe to use. Water that looks clear and tastes great may still be unsafe to drink. All well owners should test their water supply at least once a year, and more often if you know your well is old, finished in a shallow aquifer, or when a previous test indicates the well has water quality problems. Here's how to start.

Find a laboratory

County environmental health specialists, the State Hygienic Laboratory at the University of Iowa, and other Iowa certified drinking water laboratories can assist with water testing. For additional information on your options, contact your county environmental health specialist, local certified drinking water laboratory, or the State Hygienic Laboratory at 800-421-4692.

Decide what to test for

Your local environmental health specialist, health department or drinking water laboratory can help determine which tests will provide the best health-related information, which may include these:

Total Coliform Bacteria. All private wells should be tested for total coliform bacteria at least yearly. Wet times of the year (spring and fall) are good times to test, as well as any time water changes taste, odor or appearance.

Nitrate nitrogen. All private wells should be tested for nitrate every year or two, or more often if nitrate has been found at elevated levels by previous testing.

Arsenic. Every well should be tested for arsenic at least once, or more often if a second test shows the level has changed.

Other contaminants. Other contaminants sometimes occur in private water supplies. The need for additional testing depends on your well's location, depth and construction, and land use in your area. For example, test your supply for the components of volatile organic chemicals if your well is near fuel tanks or a commercial or industrial area. If your well is near an area where agricultural chemicals are stored, transferred, mixed or applied, you should consider testing for ag chemicals.

Fluoride. A number of wells in Iowa exceed the health standard for fluoride. If children under 18 drink the water, a test for natural levels of fluoride will give your dentist useful information when considering fluoride supplements. Excess fluoride can cause problems with developing teeth in children and discoloration of tooth enamel.

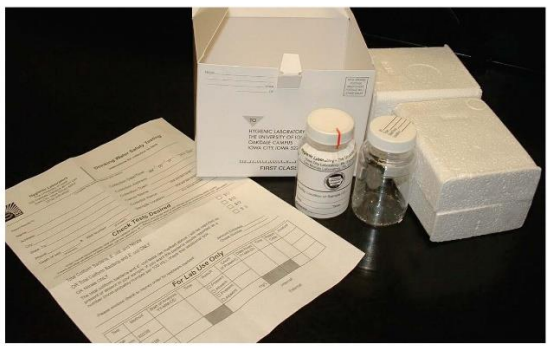
Please keep in mind that any well which is shallow in depth or finished in shallow bedrock is more vulnerable to contamination than a well completed in a deeper, protected aquifer. If your well meets one or both of these conditions, there may be additional tests you should perform.

Collecting samples

In most cases, your local county environmental health specialist can arrange to take your water samples. This fast, friendly and professional service provides accurate results.

You can also obtain the necessary bottles and take your own sample. The procedures and bottles for your testing depend on the contaminants you are testing for, so you will need to know which tests you'd like before collecting samples. Any Iowa certified drinking water lab can provide you with bottles and specific information about taking the sample.

Most health professionals recommend that you take the sample from the cold water faucet in the kitchen, where most water is used for cooking and drinking. You can also obtain the water at a sample tap near the well's pressure tank, but this will only provide you with water safety specific to the well and pressure tank, and not about the water in the home's plumbing and water treatment system.



State Hygienic Laboratory at The University of Iowa

Contact: Daniel Watterson
515-402-7981

Daniel.Watterson@dnr.iowa.gov
www.iowaDNR.gov/PrivateWellTesting



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