Why test your well water?

A safe drinking water supply is essential to human health and protecting the value of residential property. Well testing is an important part of due diligence before the purchase of any property supplied by a well.

Without testing, it is impossible to know whether well water is safe to drink. If there is contamination, the well owner will need to install and maintain a filtration system. The cost of these systems vary depending on the contaminants.

The well owner is responsible for its safety.

Private wells are not regulated under the federal Safe Drinking Water Act, which sets limits on the levels of certain contaminants in public and private water systems. If you are buying property with a private well, YOU are responsible for having the water tested.

Adequate testing is an important part of DUE DILIGENCE before the purchase of any property supplied by a well.

Does NC law require that private wells be tested?

Yes, but only if the well was installed after July 1, 2008.

Under NC’s private well testing program, N.C. Gen. Stat. 87-97, when a new well is constructed, the local health department is required to test the water for arsenic, barium, cadmium, chromium, copper, fluoride, lead, iron, magnesium, manganese, mercury, nitrates, nitrites, selenium, silver, sodium, zinc, pH, and bacterial indicators. The law only applies to new wells installed on or after July 1, 2008.

Potential contaminants in NC well water include:

Radioactive Metals
Radium & uranium.

Industrial Pollution
GenX, gasoline, dry-cleaning solvents, & VOCs.

Nitrate & Nitrite
Chemical fertilizers, human waste or animal waste.

Inorganic Metals
Barium, chromium, copper, lead, & arsenic.

Bacteria & Microbes
E. coli & coliform bacteria from animal waste.

Activities that can contaminate your well:

Construction
Decomposing waste
Surface run-off
Flooding
Leaking storage tanks & landfills
Toxic spills
Agricultural activities

Where can I learn about contaminants that may be in my community?

NC DHHS has contaminant maps by county.

Each county report depicts contamination trends found in private well water samples. These reports do not give detailed contaminant concentrations in smaller areas or for a single well. The NC DEQ Community Mapping System & Division of Waste Management Site Locator Tool are also resources for identifying contaminants of concern.
Many contaminants in NC well water that can harm health cannot be seen, tasted or smelled. They are only detected by laboratory testing. Home tests cannot detect low levels of toxic contaminants.

**THE NC DHHS RECOMMENDS THE FOLLOWING WELL TESTING SCHEDULE:**

**EVERY YEAR:**
- Test for total & fecal coliform bacteria.

Yearly testing is also recommended for inorganic metals if:

1) other wells nearby are contaminated; 2) you notice a change in how your water tastes, looks, or smells; 3) there is a toxic spill near your home; 4) people drinking from the well have unexplained illnesses; or 5) there were recent repairs or replacements to the well.

**EVERY TWO YEARS:**
- Test for inorganic metals, nitrates, & nitrites.

**EVERY FIVE YEARS:**
- Test for pesticides & volatile organic compounds* (VOCs).

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**WHAT RESOURCES ARE AVAILABLE TO PAY FOR WELL TESTING?**

**Q.** Public funding is limited, but there are options to reduce or waive your costs. **A.**

If you have a note from your doctor stating your well should be tested due to health concerns, costs may be reduced or waived by your county health department.

In 2006, the NC General Assembly created the Bernard Allen Drinking Water Fund to improve NC’s response to groundwater contamination. The Fund provides low-income households with an alternative safe drinking water supply. Funding is disbursed to counties based on financial need and public health risk posed by contaminated groundwater.

**WHO SHOULD I CONTACT TO TEST MY WELL WATER?**

**Q.** **A.**

Your county health department staff will help you set up well testing services and advise you of the costs. You can find your county health department staff at [https://perma.cc/MC9E-HWT3](https://perma.cc/MC9E-HWT3).

Additionally, you can contact an NC Certified Lab directly for testing - to find one near you, visit [https://perma.cc/8GZN-E4QC](https://perma.cc/8GZN-E4QC). It is not advisable to hire a private contractor who also provides treatment services to do testing.

**WHAT SHOULD I DO IF MY WELL WATER IS CONTAMINATED?**

**Q.** **A.**

View the NC DHHS well treatment guide for options at [https://perma.cc/J3S9-QW54](https://perma.cc/J3S9-QW54). And contact South East Regional Community Assistance Program (SERCAP) to determine whether you are eligible for a new well or well relocation.

Treatment systems can lower the amount of contamination found in your well water. Private contractors can be hired to install a treatment system. These systems vary in function, maintenance, and price, depending on the contaminant present and the installation point.

Need more information? 

*Volatile organic compounds (VOCs) are industrial chemicals used in manufacturing.

Presented by the University of North Carolina (UNC) School of Law, Law Student Well Water Pro Bono Project in conversation with the UNC Superfund Research Program, the NC Department of Health & Human Services (NC DHHS), Division of Public Health, Private Well and Health Program, & the NC Real Estate Commission.