Unhealthy levels of contaminants are common in many private wells in New Hampshire. Some of these contaminants have been linked to cancer and other diseases. Most have no taste, smell or color. It is important to periodically test well water to ensure it is safe to drink.

For information about testing your well water, treatment options or accredited laboratories in New Hampshire, visit the NHDES website. Go to the A to Z List and select “Private Well Testing” or “Water Well Testing.”

NHDES Drinking Water and Groundwater Bureau
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095
(603) 271-2513
dwgbinfo@des.nh.gov

This brochure was produced in partnership:

www.des.nh.gov

www.dhhs.nh.gov/dphs/lab/index.htm
1. Order a kit from an accredited laboratory to sample your water. The New Hampshire Public Health Lab has an online container request form, as do some other labs.

2. Follow the instructions included in the kit to sample your well water and send back the water sample(s) immediately to the lab.

3. Review the report from the lab. Any contaminants that may affect your health or your home appliances will be highlighted.

WHAT TO TEST FOR

STANDARD ANALYSIS

This covers the most common contaminants. Some of these pose health concerns while others only affect taste and/or smell. Find water quality standards on the NHDES Drinking Water and Groundwater Bureau website.

- Arsenic
- Bacteria
- Chloride
- Copper
- Fluoride
- Hardness
- Iron
- Lead
- Manganese
- Nitrate/Nitrite
- pH
- Sodium
- Uranium*

*Uranium is part of both the standard and radiological analysis packages at the State of NH Lab.

VOCs

MtBE, benzene, and industrial solvents are the most common volatile organic compounds (VOCs). MtBE and benzene are found in gasoline, and MtBE has been detected even in remote areas.

RADIONUCLIDE ANALYSIS

Rocks in New Hampshire contain naturally-occurring radioactive elements that dissolve easily in water. Radiological analysis includes tests for uranium, analytical gross alpha and radon.

A radon air test is also advisable since the greatest exposure risk is through inhaling air with elevated concentrations of radon gas. Radon test kits are available from the National Radon Program Services and at home improvement stores.

ADDITIONAL TESTS

Tests for pesticides, herbicides or other synthetic organic compounds (SOCs) may be a good idea if your water has elevated nitrite or nitrate concentrations, or if significant amounts of pesticide have been applied near your well.

Per- and polyfluoroalkyl substances (PFAS) have been detected in groundwater throughout New Hampshire due to the widespread use of these chemicals in industrial, commercial and domestic settings. Learn about PFAS and which labs test for them on the NH PFAS Investigation webpage.

HOW TO TREAT

If the lab report indicates there is a contaminant in your well water in amounts greater than state or federal health standards or recommended action levels, you should take steps to fix it.

Using NHDES’ Be Well Informed web tool, you can enter results from your lab report and get recommendations for appropriate treatment options, if needed.

NHDES also has fact sheets on its website covering all common water quality problems and their solutions. Before making a decision, consult a water treatment professional.

WHEN TO TEST

NHDES recommends that prospective homebuyers test the water in a home with a private well before purchase.

Water quality in properly located and constructed wells is generally stable, and if a change is going to occur, it occurs slowly. Thus, NHDES recommends standard, radiological and PFAS analysis testing every three to five years. Bacteria and nitrate are exceptions; you should test for them every year.

The following conditions would call for more frequent testing:

- Heavily developed areas with land uses that handle hazardous chemicals.
- Recent well construction activities or repairs. NHDES recommends testing for bacteria after any well repair or pump or plumbing modification, but only after thorough flushing of the pipes.
- High levels of contaminants found in earlier testing.
- Noticeable changes in the water, such as a change in taste, smell or appearance after a heavy rain, or an unexplained change in a previously trouble-free well.