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. Search for “Private Well Testing” or “Water Well Testing.”

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This brochure was produced in partnership:
www.des.nh.gov
www.dhhs.nh.gov/dphs/lab/index.htm
WHAT TO TEST FOR

The contaminants that are the most common in well water in New Hampshire are radon, arsenic, and bacteria. Private well users and buyers of homes with private wells should have water tested for the following common contaminants and useful parameters:

- Arsenic
- Bacteria (Total Coliform, E. coli)
- Chloride
- Copper*
- Fluoride
- Hardness
- Iron
- Lead*
- Manganese
- Nitrates/Nitrites
- pH
- Radon**
- Sodium
- Uranium

*For current well users, NHDES recommends testing for stagnant lead and copper in addition to flushed lead and copper. At the State Public Health Lab, this list would be equivalent to the “Standard” package plus a Radon test. A number of other laboratories provide the same testing. Home buyers should order the NH Well Water Test for Home Buyers, available at the State Public Health Lab and many other labs.

**Radon may be omitted for wells that do not reach into bedrock (dug wells). All homes should be tested at least once for radon in air.

HOW TO TEST

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.

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.

ADDITIONAL TESTS

The following contaminants occur often enough that all private wells should be tested at least once:

- VOCs – volatile organic compounds, such as MtBE, benzene, and industrial solvents.
- PFAS – per- and polyfluoroalkyl substances (test for PFOA, PFOS, PFHxS and PFNA, at a minimum).

VOCs occur statewide, but a number of activities and land uses seem to be associated with a higher likelihood of contamination. These include nearby fuel spills or leaks, and businesses that use petroleum products or petroleum-based chemicals.

PFAS have been used in products that are used in domestic, commercial, institutional and industrial settings. PFAS have also been used to fight certain types of fires. PFAS have affected wells throughout New Hampshire but are more frequently detected at elevated levels in southern New Hampshire.

Prices for these tests may vary considerably from one lab to another.

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, radon 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 activities that handle hazardous chemicals.
- Recent well construction 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.
- Nearby rock blasting. Test before blasting begins and several months to one year after blasting begins.