WHY TEST?

TEST YOUR WELL WATER

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.

MORE INFORMATION

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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NEW HAMPSHIRE DEPARTMENT OF Environmental Services

www.des.nh.gov

NH DIVISION OF Public Health Services
Improving health, preventing disease, reducing costs *for all*
Department of Health and Human Services

www.dhhs.nh.gov/dphs/lab/index.htm

WHAT'S IN YOUR WATER?

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.

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 activites 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.

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	Nitrate/Nitrite	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.**

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.

Is Gasoline Contaminating Your Drinking Water?

Gasoline is one of the most dangerous products commonly found around the home, yet people often store and use it with little care. Some of the chemicals in gasoline have been found in drinking water with increasing frequency, including benzene, toluene and MtBE (Methyl t-Butyl Ether), which is *easily dissolved in water* and is a possible carcinogen. Even a gasoline spills as small as a gallon can contaminate your drinking water wells or a public water supply.

To Protect Your Drinking Water from Gasoline

Avoid Spilling Gasoline on the Ground, Especially Near Wells

- Don't drain gasoline from lawn mowers, snow blowers, etc. onto the ground.
- Don't burn brush with gasoline.
- Don't top off your fuel tank.
- Keep refueling and engine work away from water supply wells, and if possible, over a concrete floor or similar barrier. Immediately clean up any gas or oil spills.

Avoid Spilling Gasoline in Lakes, Ponds and Rivers

- Keep special gasoline-absorbing pads on your gas-powered boat and know how to use them.
- If you own a larger boat, make sure it has no-spill tank vents.
- Fill portable tanks from outboard boat engines on shore.
- Refuel snowmobiles and ice augers on shore; do not take gasoline storage tanks onto ice-covered ponds.

Store Gasoline Properly

- Use a clearly labeled container made for gasoline and with a spout to avoid spills.
- Keep gasoline containers in a dry, well ventilated shed or detached garage away from water supply wells. Don't keep metal gasoline cans on a dirt floor for extended periods.

Dispose of Waste Gasoline Properly

- Handle old or dirty gasoline as hazardous waste. Bring it to a household hazardous waste collection center in a proper gasoline container.

If a spill occurs: For *any size* spill that is not immediately cleaned up, first contact your local 911 responder or fire department, then call the NHDES emergency spill number at (603) 271-3899 (Mon-Fri, 8-4), or weekends and evenings at (603) 223-4381 (NH State Police).

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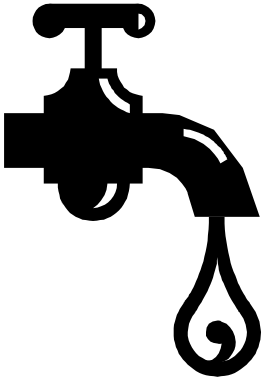
Got Clean Drinking Water?



It's up to you!

The DOs and DON'Ts for Maintaining Clean Drinking Water

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

For more information, please contact the Drinking Water Source Protection Program at (603) 271-2862 or visit our website: https:\\www.des.nh.gov

Where does your drinking water come from?

Your drinking water comes from groundwater or surface water. Groundwater is the water that flows through the spaces between soil particles and through fractures in rock. It comes from rain and snowmelt percolating through the ground. Surface water comes from rainfall and snowmelt running over land and from *groundwater* seepage into lakes, rivers and reservoirs.

Why should you be concerned?

While some pollutants, such as bacteria, viruses and phosphorus, can be reduced by passing through soil under certain conditions, groundwater can be easily contaminated by chemicals and oils. Surface water is also affected by soil and pollutants picked up as water flows over land.

Keep Household Hazardous Wastes
Out of your Drinking Water! Such as …
Automotive Fluids • Auto Batteries • Used Motor Oil
Oil-Based Paint • Paint Thinner • Antifreeze
Pesticides • Cleaning products • Gasoline

DO –

- Use non-toxic and less-toxic alternatives to pesticides and household chemicals.
- Take leftover household chemicals to your town's household hazardous waste collection day.
- Follow package directions on pesticides, fertilizers and other household chemicals.
- Check your underground fuel storage tank (UST) frequently for leaks. If a UST is more than 20 years old, replace it with an aboveground storage tank that has a concrete slab underneath it, a cover and secondary containment.
- Take care of your septic system. Inspect it every year and get it pumped out every 3-5 years.
- Avoid damage to your leach field and distribution lines by keeping vehicles, livestock and other heavy objects off of them.
- Test soil every two years to determine existing nutrient levels and pH before applying fertilizers.
- Use slow or controlled release nitrogen sources of fertilizer.
- Measure the area of your lawn to be fertilized to determine how much to use and calibrate or adjust spreader settings to match the recommended rate for fertilizers.
- Use drip pans large enough to contain motor vehicle or power equipment fluids being replaced or drained.
- Fully drain oil over a drip pan or pail before disposal. Most solid waste transfer stations accept used oil filters for recycling. Store and transport used oil filters in a covered leak-proof container until disposal.
- Keep absorbent materials such as rags, pads, "Speedi-Dry" or kitty litter near the work area and clean up all spills as soon as they occur.
- Dispose of all used absorbents immediately in a leak-proof container.
- Refuel or repair engines over an impervious surface, such as a concrete floor or tarp.
- Drain all fluids from motor vehicle parts before removing them from the vehicle.
- Follow medicine disposal guidelines described at www.nh.gov/medsafety.

DON'T –

- Buy more pesticides or hazardous chemicals than you need.
- Dispose of hazardous chemicals by pouring them down the drain or onto the ground.
- Over-use pesticides or household chemicals. More is not necessarily better.
- Have your UST removed by a contractor who is not familiar with state guidelines for UST removal.
- Overload your septic system with solids by using a garbage disposal, unless the system is specifically designed for one.
- Pour chemicals down the sink or toilet.
- Use septic system cleaners or additives containing acids or chemical solvents such as trichloroethylene (TCE).
- Use fertilizers if heavy rains are anticipated as the nutrients will be flushed from the lawn into drains and low areas.
- Apply fertilizers within 25 feet of most lakes and streams.