NH DIVISION OF Public Health Services
Department of Health and Human Services

RADON
TESTING FOR RADON IN YOUR HOME

Radon is a cancer-causing, radioactive gas that you can't see, smell or taste. Testing is the only way to know if radon is present in your home.

Radon

High levels of radon gas occur naturally in New Hampshire soil and water. It is produced by the breakdown of radioactive elements and can move up into a house from the ground. Well water that contains radon may also increase the level of radon in indoor air. Activities like taking showers, doing laundry or running the dishwasher can release radon dissolved in water into the air. The amount of radon in a home depends on many factors including geology, construction, mechanical systems and the way the building is used.

Radon is the second leading cause of lung cancer in the U.S. Simple air and well water tests can show whether home radon levels meet state and national safety guidelines.

Testing for Radon in Your Home

It doesn't matter if your house is old or new or where it is located. Testing for radon is the only way of knowing whether it is present in your home. Many radon test kits can be purchased online or in home improvement stores. Follow the directions on the packaging for the proper placement of the device and where to send the device after the test to find out your radon level. Contact the NH State Radon Program for information on how to obtain testing from a certified professional with specific skills required to successfully complete radon testing.

Tips for Accurate Testing

To get accurate results, follow the instructions provided. Here are some general recommendations for testing:

- When possible, test when your heat is on (during cool months).
- Close all doors and windows for 12 hours before starting the test.
- Keep windows and doors closed during the test, except for normal coming and going.
- Place the bottles or canisters in the lowest livable area of the house – usually the basement.
- Avoid placing tests near drafts, heat sources, high humidity and moisture.
- Avoid placing tests in the kitchen, bathroom, laundry room and during winds and precipitation.
- After the test time is over, mail the canisters back to the lab in the envelope provided.

Radon Action Levels

There is no known safe level of exposure to radon. The Environmental Protection Agency (EPA) recommends that Americans fix their home if the radon level is 4 pCi/L (picocuries per liter) or higher.

- If your radon in air test result is at or above 4.0 pCi/L, New Hampshire Department of Health and Human Services (NH DHHS) recommends contacting a certified radon mitigation contractor to help reduce radon levels in your home.
- If your radon in air test result is between 2.0 and 4.0 pCi/L, both the EPA and NH DHHS recommend considering mitigation since radon levels in this range can still increase the risk of lung cancer.

If your radon in air levels are at or above the action level, and your water comes

NEW HAMPSHIRE RADON PROGRAM

from a well, testing your water for radon may help you in determining the most effective way to reduce radon in air levels in your home. Sometimes water contributes a significant amount of radon to the air in a home and needs to be treated.

- NH Department of Environmental Services (NHDES) recommends routine well testing every 3-5 years (except for bacteria and nitrates, which should be checked annually) (NH Department of Environmental Services, 2020). To understand your test results and water treatment options, visit NHDES "Be Well Informed" website or call (603) 271-1513 or email dwghinfo@des.nh.gov.
- As a general practice, NHDES strongly recommends that private wells with radon concentrations at or above 10,000 pCi/L install treatment for the water in conjunction with mitigation of indoor air radon. For private wells with radon concentrations between 2,000 and 10,000 pCi/L, the treatment of water may be advisable if air concentrations in the home exceed 4 pCi/L.

Ways Radon Can Enter A Home

A. Cracks in concrete slabs
B. Spaces behind brick veneer walls that rest on uncapped hollow-blocked foundations
C. Pores and cracks in concrete blocks
D. Floor-wall joints
E. Exposed soil, as in a sump or crawl space
F. Weeping (drain) tile, if drained to an open sump
G. Mortar joints
H. Loose fitting pipe penetrations
I. Open tops of block walls
J. Building materials brick, concrete, rock
K. Well water

Source: Minnesota Department of Health

Reducing Radon in your home

Radon problems can be fixed. Once you know your radon numbers, you can plan next steps. In most homes, current methods make it possible to get air and well water levels below current safety guidelines.

The best way to reduce the levels of radon in air is to install a radon mitigation system. A "certified mitigation specialist" should be called to install a system that fixes the problem. In most cases, this system involves drilling a hole in the basement floor and installing a vent pipe and a fan to reduce radon entry into the home.

When a mitigation system is installed, it's important to make sure it's doing its job. Check the radon levels 24 hours after mitigation, retest radon levels every two years, and routinely check the mitigation system. The system should be effective at reducing radon down to less than 2 pCi/L.

Contact the New Hampshire Radon Program for a list of certified radon in air mitigation contractors based in New Hampshire, or visit: certifiedradonpros.org/nh.html

NOTE: The State of New Hampshire does not license or endorse radon mitigation professionals. These radon mitigation contractors are certified through their respective professional organizations.

Protect your family. Learn. Test. Treat.

Call: **(603) 271-1708**

Email: **radon@dhhs.nh.gov**

Visit: **bit.ly/RadonProgramNH**

Request your FREE Radon Test Kit!
Visit: aelabs.com/nh

NEW HAMPSHIRE RADON PROGRAM