

# RADON

## LEARN. TEST. TREAT.

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 in the Home

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. The amount of radon in a home depends on many factors including geology, construction, mechanical systems and the way the building is used.

Radon enters homes most commonly through:

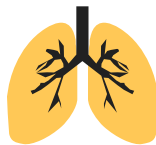
- cracks in foundations,
- openings around sump pumps and drains,
- construction joints,
- cracks in walls,
- crawl spaces, and,
- in some cases, from well water.

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.

### Radon and Health

Breathing air with radon increases a person's risk of getting lung cancer. Radon is the leading cause of lung cancer among non-smokers.

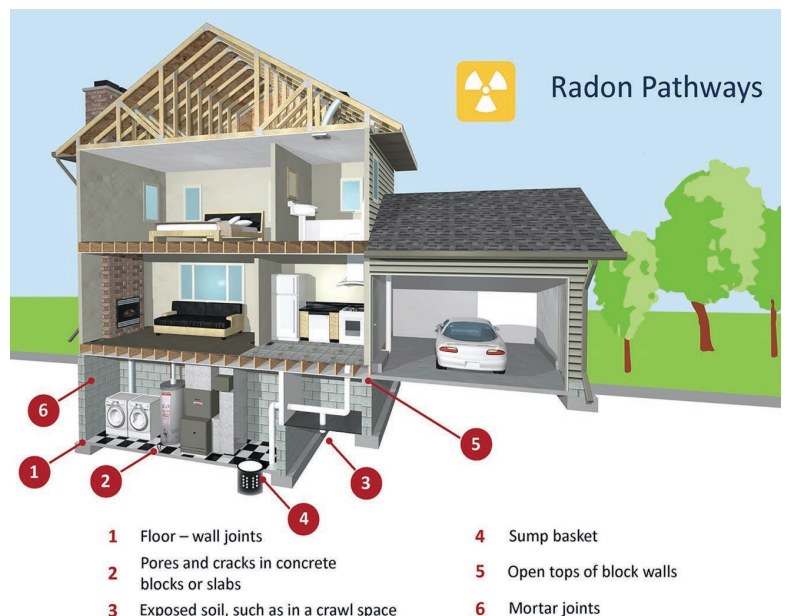
A person's lung cancer risk due to radon depends on the level of radon in the air they breathe, how long they are exposed, and whether or not they are a smoker. If you smoke and your home has high levels of radon, your risk of getting lung cancer is especially high. The concern with radon in water does not come from drinking it, but is primarily associated with showering, laundry and other household uses that transfer radon to indoor air. Health risks from drinking water containing radon are believed to be less significant than those from breathing air containing radon.



### Testing for Radon in Your Home

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 locate a certified radon professional to successfully complete radon testing.

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 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 can contribute 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). To understand your test results and water treatment options, visit NHDES "Be Well Informed" website, call (603) 271-1513 or email [dwgbinfo@des.nh.gov](mailto:dwgbinfo@des.nh.gov).
- NHDES strongly recommends that homeowners with 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.

## Reducing Radon in the Air

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](http://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.*

## Contact the New Hampshire Radon Program:

 Call: (603) 271-1708

 Email: [radon@dhhs.nh.gov](mailto:radon@dhhs.nh.gov)

 Visit: [bit.ly/RadonProgramNH](http://bit.ly/RadonProgramNH)

 Request your **FREE Radon Test Kit!**  
Visit: [aelabs.com/nh](http://aelabs.com/nh)

