Radon is a harmful gas that can build up in homes and increase the risk of lung cancer over time. This fact sheet provides property owners and occupants with easy-to-follow steps to test for radon, understand the results, and take action.



What is radon?

- Radon is a gas that you cannot see, smell, or taste.
- Radon is the leading cause of lung cancer, after smoking
- · Radon is found naturally in the dirt and rocks under homes and in well water.
- Radon moves up from the ground into your home where it gets trapped and builds up.

Does my home have radon?

Any home can have a radon problem, no matter the age, type of foundation, or location. Testing your home is the only way to know if radon is a problem. If your home has a well, it is important to test your well water at the same time you test your indoor air (See "Testing your Well Water for Radon").

There are two ways you can test your home for radon:

- Get a short-term radon test kit and do the test yourself. DPH may have free or reduced cost radon kit available to both property owners and occupants. Check https://www.mass.gov/radon for more information. Test kits can also be purchased online or at local hardware stores.
- 2. Hire a radon measurement specialist certified by either the <u>National Radon Safety Board</u> or the <u>National Radon Proficiency Program</u> to perform a short-term test.

See page 2 for tips on how to test your home.

What do my results mean?

Radon is measured in "picocuries per liter" or pCi/L. Radon occurs naturally in our environment and the average level of radon in outdoor air is 0.4 pCi/L. No home will have 0 pCi/L. Although you cannot prevent all radon exposure, there are steps you can take to reduce your risk.

The EPA action level for radon is 4.0 pCi/L or higher.

At 4.0 pCi/L it is strongly recommended that the property owner install a radon mitigation system to lower radon levels. However, mitigation should be considered for radon levels **between 2.0 and 4.0 pCi/L**.

See "Fixing Radon in Your Home" for more information.

What steps can I take if I do not own my home?

There are no Massachusetts laws that require homes, including rented units, to be tested or mitigated for radon.

Steps you can take before testing:

- If you smoke cigarettes, consider quitting. Smoking significantly increases the risk of lung cancer from radon. Take the first step toward a nicotine-free life | Mass.gov
- Improve the airflow on the lower floors of your home. Open windows, doors, and vents to increase
 ventilation and help reduce radon levels. These are short-term solutions only and may not work in
 cold weather or if you need to keep doors and windows closed to keep children safe.

Steps you can take to test:

- 1. If you feel comfortable, ask the property owner to test for radon. If not, you can conduct a short-term test yourself (see "There are Two Ways to Test" on page 1).
- 2. If radon level(s) are 4.0 pCi/L or higher, below are some options to consider:
 - a. Notify the property owner and send them a copy of the test results.
 - b. Talk to the owner about why radon is dangerous and request that they hire a certified radon mitigator to install a radon mitigation system. See the "Fixing Your Home for Radon" factsheet.
 - c. Seek counsel for legal options including lease termination if radon levels are not mitigated to under 4.0 pCi/L. Mass Legal Help may be able to provide legal assistance to income qualified individuals.

What if I already have an active radon mitigation system?

- Test every 2 years with a short-term test to make sure the system is working properly.
- Test during the heating season (November through March).

What if my home has Radon Resistant New Construction?

Homes built after January 2015 in Worcester, Middlesex, and Essex counties must already have Radon Resistant New Construction (RRNC) pursuant to the Massachusetts building code. Radon levels in these counties have the highest potential for being elevated due to geological conditions. See <u>Appendix F – Passive Radon Gas Controls</u>.

RRNC is a *passive* radon system that is designed to be activated should a radon test for a home result in elevated levels. Test your home to see if you should activate your passive radon system.

Other times to test your home for radon:

- After home renovations
- · When there is construction nearby
- During the purchase or sale of a home

See "Fixing Radon in Your Home" for more information.

For Radon questions, contact:

Email: DPHIAQ.radon@mass.gov

Radon Information Line: (800) 723-6695



Do's and Don'ts of testing your home for radon

Follow these tips to make sure your radon test is accurate.

Things to DO before a test:

- ✓ Read all the instructions that come with your test kit.
- ✓ Test between November 1 and March 31. Radon levels are typically higher in the winter. Re-test your home if your first test was in summer.
- ✓ If you are doing a short-term test lasting 2 or 3 days, close your windows and outside doors for at least 12 hours before beginning the test and for the entire test period. Normal entry and exit are allowed.

Things to DO during a test:

- Operate heating and air conditioning systems that re-circulate indoor air during the test.
- ✓ Place the test kit at the lowest livable level of the home where people could spend time.
- ✓ Place the test kit in a location where it will not be disturbed:
 - On a flat surface (such as a table) and at least 20 inches above the floor
 - 1 foot away from exterior walls, and 3 feet away from exterior walls with openings (such as doors or windows)
 - · 4 inches away from any other object
 - Away from any drafts, heat, or humidity (such as a washer or dryer)
 - Leave the kit in place for as long as the package says

During a test, DON'T:

- Don't operate whole-house fans that bring in air from the outside.
- Don't operate fireplaces.
- Don't place the test kit in your kitchen, laundry room, bathroom, or closet.
- Don't test during storms, high winds (greater than 30 miles per hour), or unseasonably warm weather.

Things to DO after a test:

- ✓ Write down the test kit ID number for future reference.
- ✓ Reseal the package. Fill in forms that come with the test and send it promptly to the lab specified on the package. You should receive your test results within a few weeks.

