



Radon is a naturally occurring radioactive gas that comes from the natural breakdown or decay of uranium found in soil and rock all over the United States. Radon travels through the soil and enters buildings through cracks and other holes in the foundation. Eventually, this decaying material forms radioactive particles that can become trapped in your lungs when you breathe.

Radon is colorless, odorless and tasteless. Testing is the only way to know whether or not an elevated level of radon is present in any room. Each frequently occupied room in contact with the ground should be measured, because adjacent rooms can have significantly different levels of radon.

How Radon Gets Into a Building

- Cracks in solid floors or walls
- Construction joints
- Gaps in suspended floors or around service pipes
- Cavities inside walls
- Water supply

Health Effects

Radon is a known human carcinogen. Prolonged exposure to elevated radon concentrations increases risk of lung cancer. Not everyone who breathes these radioactive particles will develop lung cancer, but an individual's risk of getting lung cancer depends mostly on three factors:

1. Level of radon exposure
2. Duration of exposure
3. Smoking habits

Risk increases as an individual is exposed to higher levels of radon over a longer period of time. Smoking, combined with radon, creates an especially serious health risk. The risk of dying from lung cancer caused by radon is much greater for smokers than for nonsmokers.

Radon Testing Strategy

Testing is the only way to know the radon level in a building. Testing is inexpensive and easy—it should only take a few minutes to complete.



Step 1: Initial Testing

- Take short-term tests—the quickest way to test for radon. The testing device remains in an area/room for a period of two to 90 days, depending on the device.

Step 2: Follow-Up Testing

- Take a second short-term test in rooms where the initial level is 4 pCi/L (pico curies per liter) or higher.
- Take a long-term test in these rooms for a better understanding of the year-long average radon level (testing device remains in place for more than 90 days).

Step 3: Take Action to Reduce Levels if

- The average of the initial and short-term follow-up test is 4 pCi/L or greater, or the result of the long-term test is 4 pCi/L or greater.

Continued

EPA Recommendations for Testing

- Initial short-term tests should be made in all frequently occupied, ground-contact rooms.
- Initial testing should be conducted during the coldest months, when the heating system is operating and windows and doors are closed (except for normal exit/entry).
- If a short-term test is used, the test should be conducted on weekdays with the HVAC system operating normally.
- Blanks or duplicates should accompany all testing programs to provide assurance of the quality of the measurements.
- Pay attention to how long the test should run. When testing is completed, package the test kit and mail it to the lab immediately. A test kit can become invalid if it sits around too long.

Fixing a Radon Problem

If your radon levels are found to be in excess of 4 pCi/L, the problem can be corrected. Proven techniques are available to lower radon levels and lower risks of lung cancer from radon exposure. Radon reduction systems work without being too costly. Some radon reduction systems can reduce radon levels by up to 99 percent.

For Additional Information

Environmental Protection Agency:

www.epa.gov/radon