

The RADON PROFESSOR'S FACT SHEET

What is radon?

Radon is a colorless, odorless, radioactive gas. You can't see it, feel it, smell it, or taste it. Radon comes from the radioactive decay of naturally occurring uranium in the soil.

So what? What harm does it do?

You can't see, feel, smell, or taste radon but exposure to it may cause lung cancer. Radon is a Class A known human carcinogen - an agent that causes cancer in people. Radon is the second leading cause of lung cancer, following smoking.

Where would you find radon most often?

Radon occurs in low levels outdoors and indoors. But, it's elevated indoor radon levels that pose a health risk. Most radon enters because of air pressure and temperature differences between the inside and outside air causing the house to act like a vacuum cleaner, drawing radon in from the surrounding soil through openings between the house and the soil. Some radon will always be present in any home whether it's old or new and whether the foundation type is a basement, crawlspace, or slab on grade. High radon need to be reduced.

The Illinois Emergency Management Agency (IEMA) has performed radon testing in every county in Illinois and found elevated radon levels, 4.0 picocuries per liter of air (pCi/L) or more, in every county. Radon is simply a fact of life in Illinois. It's smart to test for radon and reduce radon levels of 4.0 pCi/L or more, which is the United States Environmental Protection Agency's (USEPA) action level.

How do you find radon?

TEST for it with devices that are made specifically to detect radon. Take action to reduce indoor radon levels of 4.0 pCi/L or more. Testing is easy. Test kits are available at many hardware and home improvement stores. The IEMA website also has a list: <http://www.radon.illinois.gov/MeasurementLabs.asp>. When you test your home, test like the professionals do – test in each lowest structural area suitable for occupancy. For instance, if your house includes a basement, an area over a slab and an area over a crawlspace, TEST in at least one room in each area. The HIGHEST radon level in your house MAY NOT be in your basement.

Reducing radon in existing structures

To reduce radon in an existing structure, IEMA recommends hiring an IEMA licensed mitigation professional who is qualified to lower the radon level safely and effectively. A radon reduction or mitigation system works by using a fan to assist in collecting radon before it enters the building. Then, the radon (and other soil gases) are-discharged above the roofline so it won't re-enter the building. This is called active mitigation.

Reducing radon in new residential construction

To reduce radon initially in new residences, architects often design Passive Radon Reduction Systems (PRRS) into new houses. A Passive Radon Reduction System works without a fan to assist in lowering the indoor radon level. A builder is not required to be licensed to install passive radon reduction systems in new houses. However, if testing indicates that the radon level is still 4.0 pCi/l or more, activation of these systems requires a licensed mitigator.

After a radon reduction system is installed

Test for radon after a radon reduction system is installed. Verifying that the system has reduced the radon level to less than 4.0 pCi/L is important to your health.

For more information about radon, licensed practitioners, test kits, and *Guidelines for Home Environment Radon Measurements* visit IEMA at www.radon.illinois.gov or call 800-325-1245.

Additional radon information is available at the website of University of Illinois Extension:

www.TakeActionOnRadon.uiuc.edu .