Frequently asked questions:

What is radon?

Radon is a radioactive gas. It is colorless, odorless, tasteless, and chemically inert. Unless you test for it, there is no way of telling how much is present.

Radon is formed by the natural radioactive decay of uranium in rock, soil, and water. Naturally existing, low levels of uranium occur widely in Earth's crust. It can be found in all 50 states. Once produced, radon moves through the ground to the air above. Some remains below the surface and dissolves in water that collects and flows under the ground's surface.

What health effects are associated with radon exposure?

The Surgeon General has warned that radon is the second leading cause of lung cancer in the United States. There are currently no conclusive data on whether children are at greater risk than adults from radon. No specific subtype of lung cancer is associated with radon exposure.

If you smoke and you are exposed to elevated radon levels, your risk of lung cancer is especially high. Not everyone exposed to elevated levels of radon will develop lung cancer, and the amount of time between exposure and the onset of the disease may be many years.

Breathing radon does not cause any short-term health effects such as shortness of breath, coughing, headaches, or fever.

What is the "acceptable" level of radon in air?

The EPA states that **any radon exposure carries some risk**; no level of radon exposure is always safe. However, the EPA recommends homes be fixed if an occupant's long-term exposure will average 4 picocuries per liter (pCi/L) or higher.

What is a "picocurie" (pCi)?

A pCi is a measure of the rate of radioactive decay of radon.

How often is indoor radon a problem?

Nearly one out of every 15 homes has a radon level the EPA considers to be elevated—4 pCi/L or greater. The U.S. average radon-in-air level in single family homes is 1.3 pCi/L. Because most people spend as much as 90 percent of their time indoors, indoor exposure to radon is an important concern.

How does radon get into a building?

Most indoor radon comes into the building from the soil or rock beneath it. Radon and other gases rise through the soil and get trapped under the building. The trapped gases build up pressure. Air pressure inside homes is usually lower than the pressure in the soil. Therefore, the higher pressure under the building forces gases though floors and walls and into the building. Most of the gas moves through cracks and other openings. Once inside, the radon can become trapped and concentrated. Openings which commonly allow easy flow of the gases in include the following:

Cracks in floors and walls
Gaps in suspended floors
Openings around sump pumps and drains
Cavities in walls
Joints in construction materials
Gaps around utility penetrations (pipes and wires)
Crawl spaces that open directly into the building

While radon problems may be more common in some geographic areas, any home may have an elevated radon level. New and old homes, well-sealed and drafty homes, and homes with or without basements can have a problem. Homes below the third floor of a multi-family building are particularly at risk.

Why should I test my home for radon?

Radon is widely believed to be the second leading cause of lung cancer. Therefore, the EPA and the Surgeon General recommend testing for radon in all homes below the third floor.

Radon has been found in homes all over the United States. Any home can have a radon problem. On average, one out of every fifteen U.S. homes have a problem. The only way to know whether or not your home has a radon problem is to test for it.

Who can test a building for radon?

Anyone can use a "do-it-yourself" test kit to check their building. The one-use kits are simple to use and are relatively inexpensive.
Radon test kits sometimes are available in hardware stores and other retail outlets. They are also available through the Internet.

If a test result is less than 4 pCi/L (0.02 WL), what should be done next?

If the result of an initial short-term measurement is below 4 pCi/L, or 0.02 WL, a follow-up test is not necessary. However, since radon levels change over time, you may want to test again sometime in the future, especially if use patterns change and a lower level of the building becomes occupied or used more often. Renovations, changes in ventilation, earthquakes, settling of the ground beneath the building, and other changes may cause indoor radon exposures to change.

If an initial short-term test result is 4 pCi/L (0.02 WL) or higher, what should be done next?

The EPA recommends a follow-up measurement be used to confirm whether radon levels are high enough to warrant mitigation.

What is a radon mitigation system?

A radon mitigation system is any system or steps designed to reduce radon concentrations in the indoor air of a building.
The EPA recommends that you take action to reduce your home's indoor radon levels if your radon test result is 4 pCi/L or higher.

What are the benefits of radon mitigation?

Radon reduction systems work. In most new homes, use of radon-resistant features will keep radon levels to below 2 pCi/L. Some radon reduction systems can reduce radon levels in your home by up to 99 percent.

Cost of mitigation?

Average is $800-1200.

I'm selling my home. Am I obligated to inform the buyer of my radon level if I've had my home previously tested?

Yes. Your real estate agent (if you have one) and buyer must be informed of previous radon testing results.

Will a radon test be included in a home inspection when selling my home?

Some inspectors do include a radon test in their inspection, but not always.

Where should I put my test kit?

Place the test kit in your lowest livable space. If you don't spend at least a third of your time in your basement, don't place it there.

Can my windows be open when I test for radon?

All windows should be closed for accuracy of the reading.