Radon a Silent Killer

January is National Radon Awareness Month but, not very many people are aware of the presence of Radon or the effects it can have. Radon is a cancer causing, radioactive gas. It comes from the natural (radioactive breakdown of uranium in soil, rock and water and gets into the air you breathe). You can't see radon, and you can't smell it or taste it and it could be a problem in your home. Radon is estimated to cause 21,000 of lung cancer deaths annually according to the EPA's 2003 Assessment of Risks from Radon in Homes. The Surgeon General has warned that is the second leading cause of lung cancer in the United States today, second only to smoking. If you smoke and your home has high radon levels your risk of lung cancer is especially high.

Radon can be found throughout the U.S. and gets into any type of building. Homes, offices and schools can result in a high indoor radon level. You are most at risk to get your greatest exposure at home where you spend most of your time. Radon typically moves up through the ground to the air above and into your home through cracks and other holes in the foundation. Your home keeps it trapped inside, where it can build up. Any home has the possibility to have radon problem. Nearly 1 out of every 15 homes in the U.S. is estimated to have elevated radon levels. The only way to know about your home is to test.

Radon can't be seen, but it's not hard to find out if you have a radon problem in your home. All you need to do is test for radon. Radon in the air is measured in "picocuries per liter of air," or "pCi/L." There are many kinds of low-cost "do-it-yourself" radon test kits you can get through the mail and in some retail outlets. If you are buying or selling a home, it is recommended that you hire a qualified tester to do the testing for you. There are two general ways to test for radon, short-term testing and long-term testing. Short-term testing is the quickest way to test the radon levels. Short-term tests remain in your home for two to 90 days, depending on the device. Charcoal canisters, alpha track, electret ion chamber, continuous monitors, and charcoal liquid scintillation detectors are most commonly used for short-term testing. Radon levels tend to fluctuate from day to day and season to season, a short-term test is less likely than a long-term test to tell you your year-round average radon level. Long-term tests remain in your home for more than 90 days. "Alpha track" and "electret" detectors are commonly used for this type of testing. If you need results quickly a short-term test followed by a second short-term test can be used to decide whether to fix your home. The EPA recommends to take a short-term test and if your results are 4pCi/L or higher follow up with either a long-term test or a second short-term test. The higher your initial short-term test result, the more certain you can be that you should take a short-term rather than long-term follow up. The higher your short-term results, the more certain you can be that you should fix your home.

Since there is no known safe level of radon, there can always be some risk. But the risk can be reduced by lowering the radon level in your home. There are several proven methods to reduce radon in your home, but the one primarily used is a vent pipe system and fan, which pulls radon from beneath the house and vents it to the outside. This system, known as a soil suction radon reduction system, does not require major changes to your home. Sealing foundation cracks and other openings makes this kind of system more effective and cost-efficient. Similar systems can also be installed in houses with crawl spaces. Radon contractors can use other methods that may also work in your home. The right system depends on the design of your home and other factors. Most homes can be fixed for about the same cost as other common home repairs.

For any further information visit www.epa.gov/radon

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SURGEON GENERAL HEALTH ADVISORY:

"Indoor radon is the second-leading cause of lung cancer in the United States and breathing it over prolonged periods can present a significant health risk to families all over the country. It's important to know that this threat is completely preventable. Radon can be detected with a simple test and fixed through well-established venting techniques." January 2005

U.S. EPA Assessment of Risks from Radon in Homes

In June 2003, the EPA revised its risk assessment for radon exposure in homes. EPA estimates that about 21,000 annual lung cancer deaths are radon related. EPA also concluded that the effects of radon and cigarette smoking are synergistic, so that smokers are at higher risk from radon. EPA's revised estimates are based on the National Academy of Sciences 1999 BEIR IV (Biological Effects of Ionizing Radiation) Report which concluded that radon is the second leading cause of lung cancer after smoking. See www.epa.gov/radon/risk_assessment.html