# THE FACTS ABOUT RADON

#### WHAT IS RADON

<u>Radon is the leading cause of lung cancer in nonsmokers</u> and the second leading cause of lung cancer in smokers in the United States. The Environmental Protection Agency estimates radon causes more than 21,000 annual deaths in the United States. The simple fact is: Every day radon-induced lung cancer takes more than 57 lives in the United States. As many as 1,160 Illinois citizens are estimated to develop radon related lung cancer annually.

Radon is a cancer-causing, radioactive gas released from the natural decay of uranium in rock, soil and water. It can accumulate to dangerous levels inside buildings.

It can seep into your home through cracks, sumps, joints, basement drains, or other tiny openings in the foundation of your home. Most radon enters a home because of air pressure and temperature differences between the home and the outside air. When air is vented from buildings by natural or power ventilation, radon and other soil gases are drawn in from the surrounding soil through openings between the house and soil.

About one in 15 homes have an elevated level of radon. The US EPA estimates that as many as 8 million homes though out the country have elevated levels of radon.

It is naturally occurring in every State and can be found in your home. Radon is an odorless, tasteless, and colorless gas. High radon levels have been found in every State and can vary from area to area. <u>The only way to know if you</u> <u>have high levels of radon is to test for it.</u>

## WHY SHOULD I TEST FOR RADON

Radon gas emits radioactive particles that can be inhaled into the lungs. The adverse health effect-lung cancer-may not be produced immediately. Scientific research indicates that at least a 10 to 20 year incubation period is required before lung cancer develops.

It does not matter where you live or the construction of your home. The only way to know if radon levels are elevated in your home is to test. Both the EPA and Surgeon General recommend that all homes be tested for radon.

## HOW DO I GO ABOUT TESTING

Testing your home for radon is easy and inexpensive. It is recommended that a short-term radon test be conducted in each of the lowest levels suitable for occupancy. For example, if the house has one or more of the following foundation types basement, crawlspace or slab-on-grade.

It is also recommended that a short term test be initially conducted. Short term tests may last between two and 90 days, with most lasting between two and seven days.

Short term test kits may be obtained at most local hardware stores and from the Southern Seven Health Department. The test kits are distributed by the Southern Seven Health Department Environmental Health staff and they may assist you in conducting the test.

#### HOW DO INTERPERT THE RESULTS

Radon is measured in units called picocuries per liter of air or pCi/L. No level of radiation is considered safe, but U.S. EPA has set an action level of 4 pCi/L. If the initial test results are below 4pCi/L, no further action is needed. If the initial test results are between 4 and 8 pCi/L another short term or long term test should be conducted. A second test should be conducted for test results exceeding 8 pCi/L.

## HOW DO INTERPERT THE RESULTS

If the results from two or more tests average more than 4 pCi/L, it is recommended that the level of radon be reduced.

#### HOW DO I REDUCE LEVELS OF RADON IN MY HOME

If you have a problem, your home can be fixed using proven, cost effective mitigation techniques that are similar in cost to other home repairs – such as painting or carpet replacement.

A list of licensed radon reduction contractors (mitigators) may be obtained from the Illinois Emergency Management Agency. The Illinois Emergency Management Agency recommends hiring a licensed mitigator because they have the proper equipment, specialized training and technical skills needed.