

# Information About Radon

## EPA RADON RISK INFORMATION

Fifty-five percent of our exposure to natural sources of radiation usually comes from radon. Radon is a colorless, tasteless, and odorless gas that comes from the decay of uranium found in nearly all soils. Levels of radon vary throughout the country. Radon is found all over the United States and scientists estimate that nearly one out of every 15 homes in this country has radon levels above recommended action levels. Radon usually moves from the ground up and migrates into homes and other buildings through cracks and other holes in their foundations. The buildings trap radon inside, where it accumulates and may become a health hazard if the building is not properly ventilated.

When you breathe air containing a large amount of radon, the radiation can damage your lungs and eventually cause lung cancer. Scientists believe that radon is the second leading cause of lung cancer in the United States. It is estimated that 7,000 to 30,000 Americans die each year from radon-induced lung cancer. Only smoking causes more lung cancer deaths and smokers exposed to radon are at higher risk than nonsmokers. Testing your home is the only way to know if you and your family are at risk from radon.

## Testing for Radon.

Should you have your home tested, use the chart below to compare your radon test results with the EPA guideline. The higher a home's radon level, the greater the health risk to you and your family.

### Picocuries of Radon Per Liter of Air (pCi/L)

0 5 10 15 20 25 or greater

- **4.0 pCi/L - EPA RECOMMENDED ACTION GUIDELINE**

- 1.3 pCi/L - Average indoor radon concentration

- 0.4 pCi/L - Average outdoor radon concentration

## The U.S. Environmental Protection Agency (EPA) and the Surgeon General Strongly recommend taking further action when the home's radon test results are 4.0 pCi/L or greater.

The concentration of radon in the home is measured in picocuries per liter of air (pCi/L). Radon levels less than 4.0 pCi/L still pose some risk and in many cases may be reduced. If the radon level in your home is between 2.0 and 4.0 pCi/L, EPA recommends that you **consider** fixing your home. The national average indoor radon level is about 1.3 pCi/L. The higher a home's radon level, the greater the health risk to you and your family. Smokers and former smokers are at especially high risk. There are straightforward ways to fix a home's radon problem that are not too costly. Even homes with very high levels can be reduced to below 4.0 pCi/L. EPA recommends that you use an EPA or State-approved contractor trained to fix radon problems.

## What do radon test results mean?

If your radon level is **below 4 pCi/L**, you do not need to take action.

If your radon level is **4 pCi/L or greater**, use the following charts to determine what your test results mean.

Depending upon the type of test(s) you took, you will have to either test again or fix the home.

NOTE: All tests should meet EPA technical protocols.

### Chart 1: Radon Test Conducted Outside Real Estate Transaction

Type of Test(s) If Radon Level Is **4.0 pCi/L or Greater**

Single Short-Term Test **Test Again\***

Average of Short-Term Tests **Fix The Home**

One Long-Term Test **Fix The Home**

\* If your first short term test is several times greater than 4.0 pCi/L - for example, about 10.0 pCi/L or higher - you should take a second short-term test immediately.

## **Chart 1: Radon Test Conducted During a Real Estate Transaction (Buying or Selling a Home)**

Type of Test(s) If Radon Level Is **4.0 pCi/L or Greater**

Single Active Short-Term Test

(this test requires a machine)

### **Fix The Home**

Average of 2 Passive Short-Term Tests\*

(these tests do not require machines)

### **Fix The Home**

One Long-Term Test **Fix The Home**

\* Use two passive short-term tests and average the results.

## **What should I do after testing?**

If your radon level is 4.0 pCi/L or greater, you can call your State radon office to obtain more information, including a list of EPA or State-approved radon contractors who can fix or can help you develop a plan for fixing the radon problem. Reduction methods can be as simple as sealing cracks in floors and walls or as complex as installing systems that use pipes and fans to draw radon out of the building.

EPA has a National Radon Program to inform the public about radon risks, train radon mitigation contractors, provide grants for state radon programs, and develop standards for radon-resistant buildings. EPA works with health organizations, state radon programs, and other federal agencies to make the program as effective as possible.

**For more information about radon, its risks and what you can do to protect yourself, call 1-800-SOSRADON and request a free copy of EPA's *A Citizen's Guide to Radon*. You may also call the Radon Fix-It Line at 1-800-644-6999 between noon and 8pm Monday through Friday, EST/EDT, for information and assistance. This toll-free line is operated by Consumer Federation of America, a nonprofit consumer organization.**