

## **JANUARY IS RADON AWARENESS MONTH**

### ***Free Home Test Kits Now Available!***

*A Message from the Inyo County Department of Environmental Health Services & The Great Basin Air Pollution Control District*

One year ago, in an effort to raise public awareness, the Inyo County Environmental Health Services Department issued a series of media releases summarizing the dangers of radon in the air. At that time, fifty short-term radon test kits were made available to local renters and homeowners. Test results confirmed that buildings in our county are subject to elevated levels of radon in indoor air. This year, Environmental Health has joined forces with the Great Basin Air Pollution Control District to continue the public outreach and to provide additional test kits. Test kits are now available for first time testing (short-term kits) and for confirmation of elevated levels found in previous tests (long-term test kits).

### **WHAT IS RADON?**

Radon is a cancer-causing radioactive gas that you can't see, smell or taste. It comes from the natural decay of uranium in soil, rock and water and gets into the air you breathe. Its presence in your home can pose a danger to your family's health. Radon is the second leading cause of lung cancer in America and claims more than 20,000 lives annually. It is also the leading cause of lung cancer among non-smokers.

### **WHAT IS A SAFE LEVEL OF RADON GAS?**

This is an easy question to answer. A safe level of radon gas is no radon gas. Radon gas is a carcinogen which causes lung cancer. The US EPA has put it plainly, stating, "Any radon exposure has some risk of causing lung cancer. The lower the radon level in your home, the lower your family's risk of lung cancer." Your risk of lung cancer increases substantially with exposure to higher radon levels.

### **WHAT IS AN ACCEPTABLE LEVEL OF RADON GAS?**

**Radon Act 51** passed by Congress set the natural outdoor level of radon gas of 0.4 picocuries per liter (pCi/L) as the target radon level for indoor radon levels. Unfortunately two-thirds of all homes exceed this level. The US EPA was tasked with setting practical guidelines and recommendations for the nation. To this end, the US EPA has set an action level of 4 pCi/L. At or above this level of radon, the EPA recommends you take corrective actions to reduce your exposure to radon gas. It is estimated that a reduction of radon levels to below 2 pCi/L nationwide would likely reduce the yearly lung cancer deaths attributed to radon by 50%. But even a radon level of 2.0 pCi/L presents a cancer risk hundreds of times greater than the risks allowed for carcinogens in our food and water.

### **WHAT TO DO IF YOU HAVE ELEVATED RADON LEVELS**

1. Don't panic!
2. Confirm results- do a second test to confirm your original results.
3. Take corrective action.

There are qualified professionals that are certified by the State of California as radon mitigation contractors. As an example, two years ago a West Bishop homeowner tested his home for radon and discovered he had radon levels of 9-12 pCi/L. He hired a State certified radon contractor to remediate the situation. His home has a combination of concrete slab foundation and perimeter footings. The home also incorporated a good deal of river rocks in the walls, as well as having granite countertops. The contractor ended up installing an impermeable layer of plastic sheeting in the crawl space under the house in combination with an array of perforated plastic pipes that vent the air out from under the house via a small electric fan. Levels had dropped to below 4 pCi/L shortly after the mitigation was conducted, with further reduction expected. The cost of the mitigation project was about \$3,000-3,500. Incidentally, the contractor concluded that neither the river rock or the granite countertops contributed to the elevated radon levels.

**WHERE IS RADON?**

Radon can be found all over the U.S. It can get into any type of building - homes, offices, and schools - and result in a high indoor radon level. It typically moves up through the ground to the air above and into your home through cracks and other holes in the foundation. Your home traps radon inside, where it can build up. Any home may have a radon problem. This means new homes, old homes, well sealed homes, drafty homes, and homes with or without basements. You and your family are most likely to get your greatest exposure at home, where you spend most of your time. Also of interest is that radon levels can vary dramatically over just a short horizontal distance. So if your neighbor tests their home, these results are not necessarily indicative of what's going on in your house.

The California Department of Public Health maintains a database of home radon test results on their website. Listed below are the numbers for Inyo County:

<b>Location</b>	<b>Number of Tests</b>	<b>Tests &gt; 4pCi/L</b>	<b>Test Results Above Action Level</b>
Big Pine	15	3	20%
Bishop	111	39	35%
Independence	32	2	6%
Keeler	1	0	0%
Lone Pine	3	1	33%
<b>Inyo County Totals</b>	<b>162</b>	<b>45</b>	<b>28%</b>

As you can see, most of the samples were from the Bishop area, and a significant number of homes were found to exceed recommended radon levels. Data from the southern and eastern sections of the county is extremely limited.

### **FREE RADON TEST KITS!**

Testing is the only way to know if you and your family are at risk from radon. The US Environmental Protection Agency and the Surgeon General recommend testing all homes below the third floor. That means just about all of us here in Inyo County. At this time, there are a limited number of radon test kits available to the public free of charge. These will be available on a first come, first serve basis. There are both the 3 day short term kits and 28 day longterm kits. A short term test is recommended for initial testing. If your initial test shows elevated radon levels, a confirmation test should be conducted, using the long term kit. You place the test kit in your house, per the manufacturers instructions, and at the end of the testing period mail the kit to the private laboratory for analysis. They will send you the test results. There is no charge for obtaining the test kit, or for having the analysis conducted.

### **CONCLUSION**

Inyo County homeowners and renters are urged to obtain a radon test kit and monitor their indoor air quality. Please call us at 760-873-7867, or 760-878-0261, to obtain your free radon test kit. Inyo County Environmental Health staff will be happy to assist in the testing, as well as with locating mitigation contractors, if necessary.

And finally, if you do the monitoring, please call us and let us know your results.