



# **Safe at Home:** PREVENTING LUNG CANCER BY REDUCING RADON IN THE HOME

What is radon? Radon is a gas that you cannot see, smell, or taste. It comes from the decay of radioactive elements (such as uranium, thorium, and radium) in soil and groundwater.

# What are your chances for getting lung

**cancer from radon?** Each one of the following influences your risk:

- 1. The level of radon in your home;
- 2. The amount of time you spend in your home;
- 3. Smoking tobacco, or if you have ever smoked tobacco; and
- 4. Exposure to secondhand smoke.



HOW DOES RADON CAUSE LUNG CANCER?

#### How does radon get into your home?

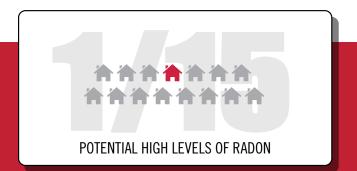
Radon can rise from the rocks in the ground, through the soil, and to the air above. It comes into your home through cracks and holes in the foundation. Radon can become trapped in a house whether it is new or old, or has a basement, crawlspace, or slab. It can also be found in multifamily and high-rise buildings. Underground well water contaminated with radon can release radon gas into the house when using water.

# Why should I be concerned about

**radon?** Breathing radon is the second leading cause of lung cancer after smoking. Radon-induced lung cancer is the likely cause of around 820 deaths each year in Georgia and 21,000 deaths each year in the United States.

### How does radon cause lung cancer?

Radon gas decays into radioactive particles that can get trapped in your lungs when you breathe. These particles break down and release small bursts of energy. This can damage lung tissue and lead to lung cancer over the course of your lifetime. Not everyone exposed to high levels of radon will develop lung cancer, however the risk for lung cancer is increased.



### How often is radon found?

Nearly one out of every 15 U.S. homes is likely to have a high level of radon. Homes in all counties of Georgia have tested at high levels for radon. The only way to know if your home has a radon problem is to test it.

### Is radon only measured in homes? No.

Radon can get into any type of building. You and your family are most likely to be exposed at home because you spend most of your time there.

# What is considered a high level of radon in the home? The amount of radon

in the air is measured in picocuries per liter of air, abbreviated as pCi/L. A radon level in the home between **2 and 4 pCi/L** is considered moderate risk, while more than **4 pCi/L** is considered high risk for your health.

#### I am buying/selling a home. How do I get a property tested for radon? There

are no laws in Georgia regarding radon testing. The UGA Radon Program recommends that you hire a certified radon contractor. This will give you reliable test results quickly. If you get your water from a well, you can test your groundwater for radon using a test kit from your local county extension office. Visit <u>radon.uga.edu</u> for a list of certified radon testers.

# What if the radon levels are high in my home? Can my home be Fixed?

The U.S. Environmental Protection Agency (EPA) recommends fixing homes that have an average radon level over **4 pCi/L**. The EPA suggests your consider fixing your home if it tests between **2 and 4 pCi/L**. Most homes can easily be fixed to bring the radon levels below **4 pCi/L**. Lowering high radon levels requires special knowledge and skills. Pick a contractor who is trained to fix radon problems. The National Radon Proficiency Program or the National Radon Safety Board certifies trained contractors.

# How do I fix my home if the test shows there is a high level of radon in water?

The UGA Radon Program recommends testing well water for radon. Its experts say you should fix well water that tests high for radon. If the radon level is high in the well water, a second test for other types of radioactive particles like uranium and radium should be done. Select a contractor who is trained to fix radon problems. Contact your county extension office for a radon in water test kit (1-800-ASK-UGA1).

**What will it cost me?** The average cost for fixing a radon problem in an existing home is \$1,500, but can range from \$1,200 to \$2,500. A radon treatment system for private well water ranges from \$1,500 to \$5,000.

#### Will a radon reduction system impact the sale of my home? Radon reduction systems have been installed in homes across

Georgia. It is commonplace for national home building companies to include radon-resistant new construction features into their new homes. Having a radon reduction system in your home should increase home safety and not affect home sales. Visit <u>radon.uga.edu</u> for more information.

#### UGA Radon Education Program <u>radon.uga.edu</u>

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