

# **Basic Radon Facts**

## **What is Radon?**

Radon is a naturally occurring, invisible, odorless gas that comes from deposits of uranium in soil, rock and water. It is harmlessly dispersed in outdoor air, but when trapped in buildings can be harmful, especially at elevated levels. Radon is a radioactive decay product of radium, which is itself a decay product of uranium. Uranium and radium are both common elements in soil.

## **Where is Radon Found?**

The primary source of high levels of radon in homes is from the soil containing uranium that is under and close to the home. Radon has been found in elevated levels in homes in every state, and the U.S. Environmental Protection Agency estimates that as many as one in 15 homes across the U.S. have elevated radon levels.

## **How Does Radon Get Into My House?**

Warm air rises. When this happens in your home, it creates a vacuum in the lower areas of the house. Nature abhors a vacuum, so something must rush in to fill it. In the case of your home, air seeps in from the soil around and under the house, and some air is sucked in through openings (cracks and in floors) on the lowest level. Radon gas enters the same way air and other soil gases enter the home; through cracks in the foundation floor or walls, hollow-block walls, and openings around floor drains, pipes and sump pumps.

## **What are the Health Effects of Radon?**

Exposure to radon is the second leading cause of lung cancer in the U.S. Radon can be inhaled into the lungs, where it undergoes radioactive decay. As it decays, radon releases tiny bursts of energy called alpha particles, which can harm sensitive lung tissue by damaging the DNA. This damaged DNA can lead to lung cancer.

## **How is Radon Measured?**

Radon is measured in picocuries per liter of air (pCi/l), a measurement of radioactivity. The U.S. EPA and the Centers for Disease Control and Prevention recommend that homes with radon levels at and above 4 pCi/l be fixed.

## **How do I Find Out if My House has Elevated Levels of Radon?**

Testing is as simple as opening a package, placing a radon detector in your home in a designated area, and, after the prescribed number of days, sealing the detector back in the package and mailing it to a lab. The whole process only takes a few minutes of your time!

Both long-term (9 to 12 months) and short-term (2 to 4 days) test kits are available, for \$15 and \$5 respectively, at one of the County Extension offices listed on the back. They may also be purchased online at the *Radon in Alabama Web site [www.aces.edu/radon](http://www.aces.edu/radon)*

# Does Alabama Have a Radon Problem?

## Radon in Alabama

Alabama has 15 counties that have been identified as having among the highest levels of radon in the country. **Madison** and **Colbert** counties have the greatest problems. Other counties identified with problems include **Calhoun, Clay, Cleburne, Coosa, Franklin, Jackson, Jefferson, Lauderdale, Lawrence, Limestone, Morgan, Shelby** and **Talladega**. **Marshall County** is included in the Radon Program even though it is a Zone 2 county. County agents located at the County Extension System offices listed below have more information.

### Program County Extension Offices

Clay - (256) 354-5976

Cleburne & Calhoun - (256) 463-2620

Colbert - (256) 386-8570

Coosa - (256) 377-4713

Franklin - (256) 332-8880

Jackson - (256) 574-2143

Jefferson - (205) 325-5342

Lauderdale - (256) 760-5860

Lawrence - (256) 974-2464

Limestone - (256) 232-5510

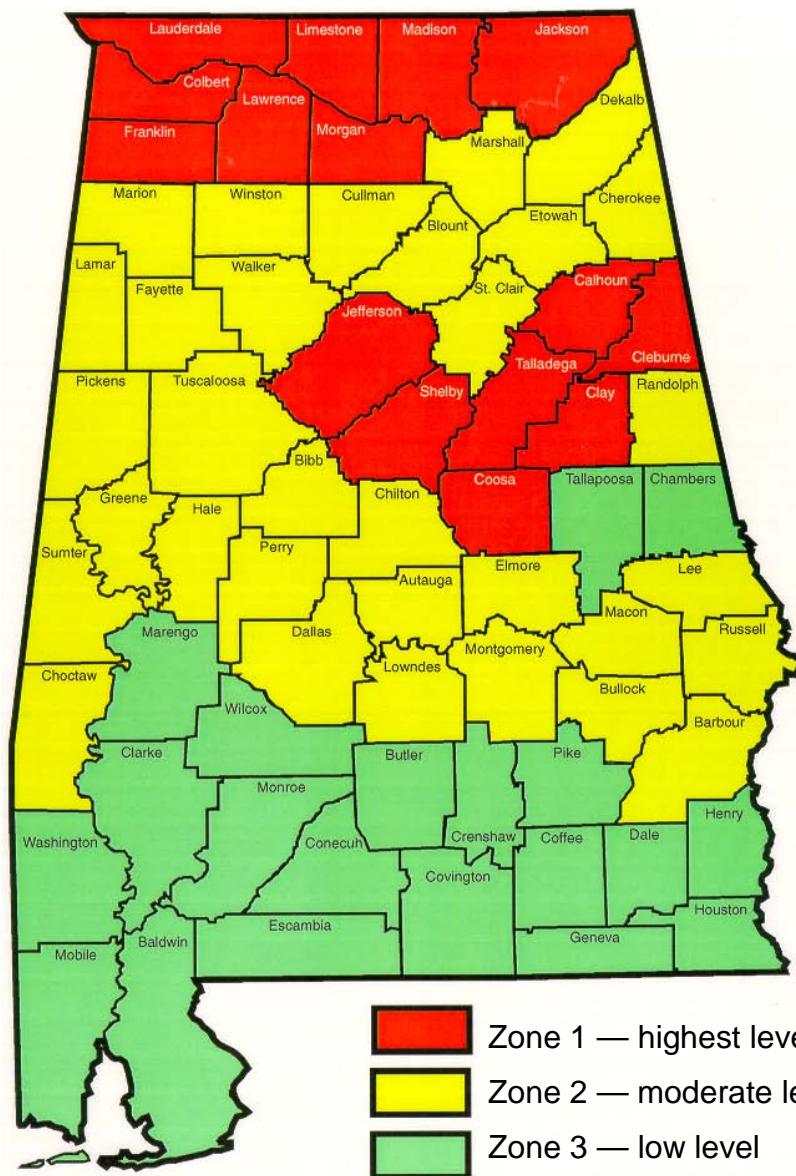
Madison - (256) 532-1578

Marshall - (256) 582-2009

Morgan - (256) 773-2549

Shelby - (205) 669-6763

Talladega - (256) 362-6187



### All other Alabama counties -

National Radon Hotline 1-800-767-7236

Patricia W. Smith, Auburn University (256) 710-7702



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