Radon Information

Why is radon a problem?

Radon occurs naturally when uranium breaks down to form radium which breaks down to form radon. Uranium is often found in high concentrations in granite and rocky soils. Radon is released into the soil and can easily enter a home through cracks and holes in the foundation and also in well water. It is an ionizing radiation and can build up to dangerous levels inside homes, schools, and other buildings. Radon is the second leading cause of lung cancer in the United States, after tobacco smoke. Radon kills nearly 21,000 people each year, more than 800 of them in Georgia. Smokers are at an even higher risk of radon-induced lung cancer than nonsmokers. Radon is considered a high level if a test result is above 4 picocuries per liter (pCi/L) then levels in the air are reduced by a mitigator that typically uses a vent pipe system and fan to pull radon from beneath the house and vent it to the outside.

Radon gas enters the home through the foundation and well water. Pressure differences within the home (from warm air rising and other natural effects) pull radon into living spaces from the soil. Furnace & air conditioning systems can distribute the air through the structure. While sealing may be a necessary part of the radon mitigation process, the EPA does not recommend the use of sealing alone to reduce radon because by itself; sealing has not been shown to lower radon levels significantly or consistently. Any home may have a radon problem, new or old with or without a basement, sealed basement or not. Radon from soil gas is the main cause of radon problems. Other less common sources include well water and building materials. Measuring radon concentration in the air is recommended for initial testing.

HOW DO RADON MITIGATION SYSTEMS WORK?

- Radon systems are permanently installed soil depressurization systems which when active create a vacuum in the soil under the foundation of the home, office or building.
- Mitigation systems continuously block the flow of radon gas by removing it from the soil before it can enter through the foundation.
- The system can be hidden internally by routing the pipes through the attic of the home or can be installed on the exterior of the home.
- Radon specific exhaust fans create a permanent vacuum in the radon suction pipes.
- Passive radon mitigation systems can be installed while the home or building is being constructed. Radon resistant new construction techniques can prevent radon entry without the use of a radon exhaust fan.

Find mitigators in your area by contacting the National Radon Proficiency Program or National Radon Safety Board.
Radon levels in Georgia Counties*

Percentage of homes tested with levels 4.0 pCi/L and above
- 36% and above
- 29% - 35%
- 22% - 28%
- 15% - 21%
- 8% - 14%
- 0% - 7%
- Insufficient data

4.0 pCi/L is EPA’s Radon Action level. EPA recommends that you fix your home if your radon level is 4.0 pCi/L or above.

*Testing data are from individuals who self-selected to test their homes for radon.

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Data reflect tests from 4 radon labs from January 1990 to December 2018. Counties with fewer than 15 radon tests are not included.