

WHAT IS RADON?

Radon is an invisible, odorless, radioactive gas formed by the natural decay of uranium in the soil. Radon is everywhere. Colorado has high concentrations because of geographical makeup of our rock and soil. Radon is a health hazard when it accumulates to high levels inside homes. Radon exposure is estimated to be the second leading cause of lung cancer deaths in the United States. When coupled with smoking, radon exposure dramatically increases an individual's risk factor for developing lung cancer.

RADON IN LAPLATA COUNTY?

Based on testing done in this area since 2006, 63% of homes in La Plata County were at risk and mitigation recommended. Radon problems have been identified in every state.

ALL HOMES SHOULD TEST FOR RADON, REGARDLESS OF GEOGRAPHIC LOCATION.

The Colorado Department of Public Health and Environment (CDPHE) estimates 1 out of every 2 homes in Colorado has radon levels at or above EPA's recommended action guideline level of four picocuries per liter of air (pCi/L).

TEST FOR RADON

Testing for radon is easy. Test kits are available at hardware and home stores. Often San Juan Basin Health Department and the Colorado State University Extension office have kits at no charge through their educational and outreach programs. Radon gas enters a home 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. Air is sucked into the home with negative air pressure.

SHORT-TERM TESTING vs. LONG-TERM TESTING

After the home is occupied, either a Short-term test (3 days) or a long term test (greater than 90days) is recommended. Either can detect the level of radon in the home. A short term test is recommended for quick results and can be repeated if necessary. It is recommended that the short term test be completed during the winter months for improved accuracy. Because radon levels vary from day to day and season to season, a long-term test will tell annual average radon level. Long term testing will give a more

accurate reading. Long-Term Tests remain in your home for 90 days or more.

Every new home plan should include RADON RESISTANT NEW CONSTRUCTION

It's more cost-effective to include radon-resistant techniques while building a home rather than installing a radon reduction system after construction. Radon-resistant new construction techniques are consistent with state-of-the-art energy-efficient construction. Follow the Model Energy Code for weatherization to result in energy savings and lower utility bills. These construction techniques help block radon from entering the home. If high radon levels are found, the techniques allow for easy and inexpensive installation of a fan to reduce radon levels in the home. **Every new home should be tested for radon by the homeowner after occupancy.** Radon-Resistant construction techniques vary for different foundations and site requirements. Ask La Plata County Building Department (970-382-6250) for a copy of *Building Radon Out-A Step by Step Guide (EPA/402K-01-002)*

NEW HOMES AND RADON

La Plata County's **Radon Resistant New Construction** recommendations uses passive ventilation and provides for easy addition of a radon exhaust fan if needed. Testing has shown the passive system reduces radon by half on average. However, a significant number of new homes will still exceed 4pCi/L with the passive system installed. Conduct a radon test and install a fan to achieve levels less than 2pCi/L. A variety of methods are used to address indoor radon levels, from sealing cracks in the floors and walls to changing the flow of air into the home. Simple systems, known as sub-slab depressurization, use pipes and fans to remove radon gas from beneath the concrete floor and foundation before it can enter the home. Radon is vented above the roof, where it safely dissipates. Active depressurization has proven to be a very cost-effective and reliable technique for radon reduction, by collecting the radon from beneath the building before it can enter. How this technique is applied depends upon the type of foundation.

Of all the environmental concerns that we could be faced with, radon is one of the least expensive to prevent and measure.