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Radon is a tasteless, colorless and odorless gas that is a decay product of uranium and occurs naturally in soil and rock. Radon gas has been identified as the second leading cause of lung cancer, second only to cigarette smoking, and it is estimated to be responsible for 21,000 deaths annually.¹ Radon breaks down into components called radon progeny, sometimes called "radon daughters," which emit high-energy alpha particles. These emissions raise the risk of lung cancer.

- The main source of high-level radon pollution in buildings is surrounding uranium-containing soil such as granite, shale, phosphate and pitchblende.
- Radon enters a home through cracks in walls, basement floors, foundations and other openings. It may also contaminate the water supply, especially in private wells.
- Over a person's lifetime, particulate radon progeny can enter the lungs, attach themselves, and may eventually lead to lung cancer. Radon is believed to cause between 15,000 and 21,000 U.S. deaths from lung cancer annually.
- A level of four picocuries per liter (pCi/L) of air has been identified by the U.S. Environmental Protection Agency as the level at which remedial action should be taken.
- Radon has been identified in every state. An estimated 6% (one in 15) of homes in the United States are estimated to have elevated levels of radon.
- Smokers exposed to radon substantially increase their risk of lung cancer in comparison to exposed non-smokers.
- There is a synergistic effect between radon and smoking with regard to risk of lung cancer.

Smokers exposed to radon have a ten to twenty times increased risk of developing lung cancer than non smokers.

- It is possible for one home to have elevated levels of radon while a neighboring home does not. Testing is the only way to determine levels of radon in a structure. Testing can be done through do-it-yourself home test kits or through a professional testing firm. Call 1-800-LUNGUSA to find out where to buy a do-it-yourself radon testing kit.
- A trained contractor can also do the testing. Look for National Radon Safety Board (www.nrsb.org) or National Environmental Health Association (www.neha.org) certification when approaching a contractor.
- Home test kits labeled "meets EPA requirements" should be used. Both long-term and short-term tests can be done.
- Short-term tests remain in the home for two to 90 days, depending on the device. "Charcoal canisters," "alpha track," "electretion chamber," "continuous monitors," and "charcoal liquid scintillation" detectors are the most common short-term testing devices.

- Long-term tests remain in the home for more than 90 days. "Alpha track" and "electret" detectors are commonly used for this type of testing. A long-term test gives a more accurate annual average radon level than a short-term test, because radon levels vary day to day and season to season.
- Radon levels can be lowered through a variety of repairs, from sealing cracks in floors and walls to changing the flow of air into the building.
- Sub-slab depressurization uses pipes and fans to remove radon gas from beneath the concrete floor and foundation before it can enter the building. Radon is vented above the roof, where it safely disperses.
- Soil depressurization is used to ventilate the soil surrounding the home so that radon is drawn away before it can enter the structure.
- Repairs to decrease radon levels should be made by a contractor certified by the National Radon Safety Board or the National Environmental Health Association.