

Is Radon a Real Problem?

Surgeon General of the United States Health Advisory:

“Indoor radon gas is a national health problem. Radon causes thousands of deaths each year. Millions of homes have elevated radon levels. Most homes should be tested for radon. When elevated levels are confirmed, the problem should be corrected.”

Radon results give reason to test

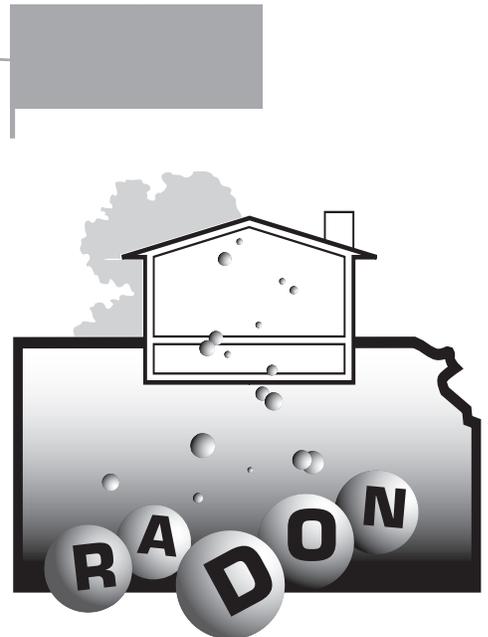
Radon is a natural, tasteless, odorless, colorless, radioactive gas produced from the decay of uranium that is found in nearly all soils. Radon gas moves from the ground under and around your home through cracks and other holes in the foundation. Nearly one out of every 15 homes in the U.S. is estimated to have elevated radon levels. The only way to know the radon level in your home is to test.

Radon testing results in Kansas show there is a need for more testing. Present indicators are that one in four houses in Kansas may have elevated levels. In some counties this rate may be higher.

Radon appears to be the leading cause of lung cancer among nonsmokers, considering even the lowest estimates, which vary widely. Given the increased potential for lung cancer the radon hazard brings, Kansans should be asking themselves, “Have we tested our home yet?”

Nationally, radon contributes to about 21,000 deaths per year from lung cancer. The risk of developing lung cancer increases as the concentration and length of exposure to radon increases. Most scientists believe children may run an even greater risk from radon exposure than adults, and smokers are definitely at greater risk than nonsmokers.

The Surgeon General’s Office, the American Lung Association, the American Medical Association, and the U.S. Environmental Protection Agency (EPA) recognize that indoor radon constitutes a substantial health risk. They have publicly advised that all homes be tested.



Kansas Radon Program

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The EPA estimates that six million homes in the United States have unsafe levels of radon. It also encourages testing of other structures where people spend extended periods of time. The EPA Map of Radon Zones (pg. 2) contains information on radon potential variations between counties.

A much larger percentage of homes have been tested in urban areas because most relocation companies require testing before they handle a property. Many corporations use relocation companies to purchase homes of transferred employees, allowing them to move more quickly.

Potential liability concerns have led these companies to require radon testing before purchasing the property. If a radon test result is higher than 4 picocuries per liter (pCi/l), the relocation company requires radon reduction work be done and a retest to confirm lowered radon levels.

Although corporate liability has been the driving force for much of the testing performed to date, many people are now asking for a radon test as part of a real estate transaction. If results come back high, the buyer may want the level reduced before taking title to the property. Unfortunately, fewer people test because they are concerned about the health risk of radon exposure. It would be nice to be able to predict radon levels based on house type, foundation type, soil type, or other features of a building or site, but it's just not possible. There is no way to project radon levels in any one house, block, neighborhood, community, or county without testing.

Several years ago, the Kansas Department of Health and Environment and EPA conducted tests in every Kansas county. Unfortunately, in many less populous rural counties, only a handful of sites were tested. A strong need remains for more testing before average county levels or potential for high readings can be estimated.

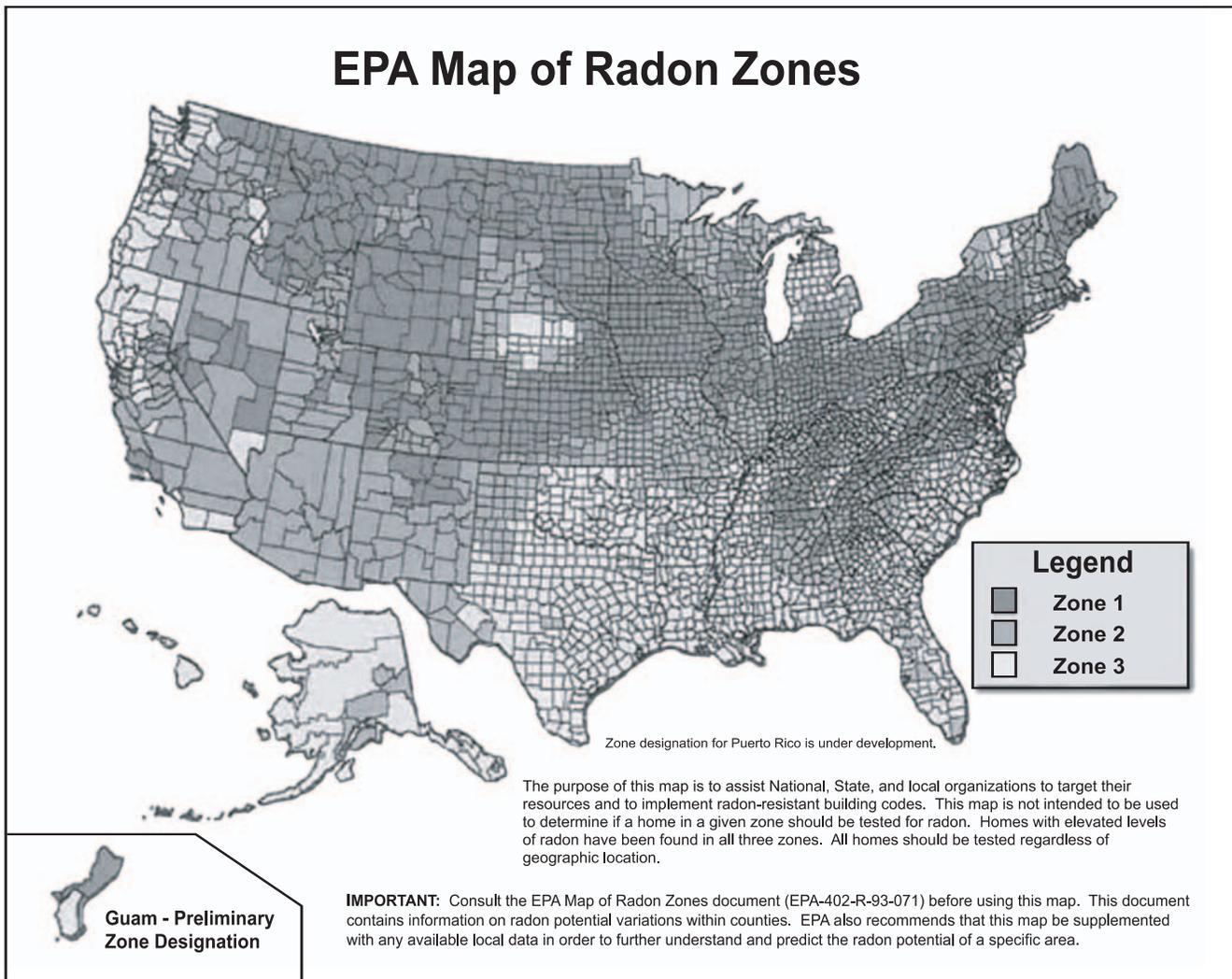
Some trends are starting to become evident in Johnson

County where, according to private testing firms, 30 percent, and in some communities 50 percent, of the homes tested have levels of more than 4 picocuries per liter. A few homes have produced short-term test results in excess of 100 picocuries per liter.

Typical radon levels in outdoor air range from 0.2 to 1 pCi/L. Radon in indoor air can measure from less than 1 to 3,000 pCi/L. The average indoor level is 1.3 pCi/L. 4 pCi/L is the EPA's recommended action level.

Unlike other environmental health risks, radon is in individual homes. It requires people taking action themselves rather than relying of the government. This is one of the few environmental hazards that you can act against. Why ignore it? Why not remove all doubt? Test for radon now.

For more information, call the Kansas Radon Program at 1-800-693-5343, or visit our Web site at <http://radon.oznet.ksu.edu>.



The Kansas Radon Program is conducted by Engineering Extension at Kansas State University under a contract with the Kansas Department of Health and Environment. For information, contact the Kansas Radon Program Coordinator at 1-800-693-5343.