

## Facts About Radon:

- Radon is ranked as the second leading cause of lung cancer, resulting in as many as 14,000 deaths in this country annually.
- Nationally, 1 out of every 15 homes is estimated to have high indoor radon levels, **but in Kansas, as many as 1 in 4 homes may have elevated indoor radon levels!**
- Radon can be found in any home, not just homes with basements.
- Radon levels can vary widely, even from home to home in the same neighborhood.
- Radon levels can be reduced in existing homes, and by incorporating radon-resistant construction techniques into the building process, problems can usually be avoided in new homes.

## Radon in Home Buying and Selling

### Radon testing during a real estate transaction

Radon testing may soon become a typical step in every real estate transaction. In many areas of the country it already is. Firms that handle employee relocation sales for large corporations almost universally require a radon test and, if necessary, that radon reduction work be done before taking possession of an employee's property.

In a 1987-1988 Kansas Department of Health and Environment/U.S. Environmental Protection Agency radon survey of 2,031 homes in Kansas, the average radon level was 3.2 picocuries per liter (pCi/L) of air. More than 25 percent of the homes measured had short-term (two-day average) radon levels greater than 4 pCi/L, a level that warrants further action. In some areas of Kansas, the percentage of home with test results more than 4 pCi/L exceeded 40 percent.

With approximately 800,000 single-family dwellings in Kansas, the potential exists for up to 200,000 of them to be candidates for additional radon testing. Perhaps half of these – 100,000 homes – can be expected to be confirmed, by the additional testing, to be in need of radon-reduction work.

The only way to know if a home has a radon problem is to test. You can't predict radon levels based on location, foundation type, age of construction, tightness of house, or on almost any other factor of which you can think.

In public opinion surveys, there has been significant support for dealing with radon at the time of real estate transactions.

A neighbor's radon reading cannot substitute for a reading in your home. Only testing can provide you with a level of confidence about the potential radon exposures you face.



Buyers usually instigate the testing. If radon levels are unacceptably high (i.e. 4 pCi/L or more), they want to know. The buyer may pay for the cost of the test, but expects the seller to pay for the radon-reduction system, if necessary. The buyer may also want to know radon levels in an area of the home the seller might not otherwise test.

The seller or realtor can be held legally liable when either one knows the radon level in the house or fails to reveal, in a reasonable fashion, information that may be important to a buyer making decisions.

Questions of validity and reliability of radon measurements are often raised because the potential for test tampering is high when test conditions are controlled by the seller, who may have an interest in a low test result.

Having the test conducted by a radon professional measurement specialist listed in a national Radon Measurement Proficiency program, such as National Environmental Health Association (NEHA) or National Radon Safety Board (NRSB), is the best bet for a valid test. If a qualified testing service is not available, and you elect to do the testing yourself, be sure to follow the test kit instructions carefully.



Testing for radon and, if necessary, fixing a home that has a high level, may be stumbling blocks in the compressed time frame of real estate transactions. This is especially true if the issue is raised late in the process, such as the week before closing. Getting a reliable test that satisfies both buyer and seller is not too difficult in most urban areas, but may be an obstacle in rural areas of Kansas.



**The best approach you can take as a homeowner is to conduct a short-term screening....**



If a reliable test comes back high and radon reduction work is needed, getting that work accomplished in the time before closing can be difficult, regardless of location.

Although radon reduction costs the same as repairs for many other home-related problems, sellers may, due to inexperience, believe that radon problems are not as easily fixable and, as a result, may permanently threaten the value of the home even after all possible reduction has been accomplished.

This misconception has led to tampering with measurement devices or test conditions to achieve low test results.

Surveys have shown that radon does not significantly influence the value of homes once mitigation systems are installed.

The best approach you can take as a homeowner is to conduct a short-term (two to five days) measurement, preferably during the heating season. If the results are more than 4 pCi/L, follow up with either a long-term test or a second short-term test. The higher your initial short-term result, the more certain you can be that you should take a short-term rather than a long-term follow-up. Save the results so the information can be made available to a prospective buyer. Take action to reduce levels if the results are higher than 4 pCi/L. This will reduce your personal risk and the likelihood that radon will be a problem in the eventual sale of your home.

Advance testing make disclosure to the buyer more convenient and may expedite the negotiating and sale or purchase process. The long-term test results will give the best indication of health risk and will avoid having to rely on a last moment short-term test, which often will yield less accurate results.

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.

If you are buying a home, there is no reason not to buy one with a radon problem if it meets many or all of your other criteria. Typical radon-reduction costs much the same as other home repairs (from \$800 to \$2,000). Because increased risk comes from long-term exposure, there is ample time to reduce radon levels before you spend significant time (months and years) in the same home.

For a list of radon measurement and mitigation contractors and a description of guidelines the contractors should follow, call the Kansas Radon Program at 1-800-693-5343.