

Radon Is a Quiet Killer

By TERRY RINDFLEISCH/La Crosse Tribune 1/25/06

When Allen Ebert was looking at a home in La Crosse, he wanted the radon levels checked.

Most of the time, no radon problems are discovered when buying a home. But to the surprise of Ebert and the home's owners, a radon test showed levels almost triple the amount considered safe by the U.S. Environmental Protection Agency.

The home had a reading of 11.8 picocuries per liter. The EPA recommends fixing a home if the radon level is 4 picocuries per liter or higher.

"The owner lived there for 31 years and had no idea it was that high," said Ebert, who with his wife, Karen, moved to

La Crosse after he took the job as the new artistic/managing director of the La Crosse Community Theatre.

The radon level now is below the acceptable level after a vent pipe system and fan, which pulls radon from beneath the house and vents it to the outside, were installed in the home. The cost of the system was \$1,500, which was paid by the seller.

"We would have never known about the radon levels unless we had the home tested," Ebert said.

About 1 out of every 15 homes in the United States is estimated to have elevated radon levels.

Jim Steinhoff, environmental health specialist for the La Crosse County Health Department, said the radon risk is higher in Wisconsin due to soil types.

About 30 percent of the tests come back elevated in La Crosse County, but only 10 percent of the homes have higher than recommended levels, he said.

"Iowa is one of the worst states for radon because of the geological makeup," he said.

Steinhoff said more home buyers and renters are asking about radon levels before they buy or rent a home.

"That's usually the only time you think about radon," Steinhoff said. "We don't usually think about the dangers.

"January is National Radon Action Month, and that's when we try to make people more aware of the problem," he said. "Wintertime, when the windows and house are closed up, is a good time to test for radon."

Steinhoff said radon is the second leading cause of lung cancer in the United States and the leading cause among non-smokers.

Radon is estimated to cause about 21,000 lung cancer deaths per year, according to EPA's 2003 Assessment of Risks from Radon in Homes. A 2001 study in Iowa found that 1,000 women who lived in one house for more than 20 years had a significant risk for lung cancer.

“Radon gas decays into radioactive particles that can get trapped in your lungs when you breathe,” Steinhoff said. “As they break down further, these particles can damage lung tissue and lead to lung cancer over the course of your lifetime.”

Smoking combined with radon is an especially serious health risk, increasing one's risk for lung cancer, Steinhoff said. “Radon is more efficiently inhaled when you smoke,” he said.

Radon, a radioactive gas, comes from the natural decay of uranium that is found in nearly all soils.

It typically moves up through the ground to the air above and into your home through cracks and other holes in the foundation. Your home traps radon inside, where it can build up. Any home, old or new, may have a radon problem.

Steinhoff said radon gets through cracks in solid floors, walls, construction joints, gaps in suspended floors and around service pipes, cavities inside walls and the water supply.

He said the initial radon test kit is inexpensive, \$9.95 if ordered from the National Safety Council (1-800-767-7236), or other easy-to-use test kits can be purchased for about \$20 at some hardware and home improvement stores.

If the radon levels are elevated, Steinhoff recommends a long-term test for more than 90 days to confirm the results. He said the health department, which is a radon information center for La Crosse and Monroe counties, can provide information and recommendations.

Two ways to test for radon

Short-term tests remain in your home for two to 90 days, depending on the device. “Charcoal canisters,” “alpha track,” “electret ion chamber,” “continuous monitors” and “charcoal liquid scintillation” detectors are most commonly used for short-term testing. Because radon levels tend to vary from day to day and season to season, a short-term test is less likely than a long-term test to tell you your year-round average radon level. If you need results quickly, however, a short-term test followed by a second short-term test may be used to decide whether to fix your home.

Long-term tests remain in your home for more than 90 days. “Alpha track” and “electret” detectors commonly are used for this type of testing. A long-term test will give you a reading that is more likely to tell you your home's year-round average radon level than a short-term test.

For more information, the Environmental Protection Agency has a radon section on its Web site at epa.gov, or call the National Radon Information Line at 1-800-767-7236. In Wisconsin, go online at www.lowradon.org or call 1-888-569-7236.

Source: Environmental Protection Agency