

# Take Radon Gas Seriously

**D**id you know that you would be safer living on top of a radioactive waste dump or inside a uranium mine than living in some North American homes? Is your house one of them? How would you know? Without a radon gas test there is no way of knowing if any particular house has high radon gas levels. You can't even go by region, because radon gas is found throughout North America and neighboring houses often have very different readings. In the U.S., where they take radon gas more seriously than we do here, the Environmental Protection Agency and the Surgeon General recommend that all homeowners conduct a radon test – and not just when you are selling your home. The National Safety Council provides a free hotline and offers \$9.95 coupons for a do-it-yourself radon test kit. The best scientific evidence is that *any* level of radon is dangerous and that people should not live in homes with levels higher than about four times normal (the U.S. level at which remedial action is recommended.) In Canada, lax regulations do not call for remedial action until the levels are 20 times normal. Radon is a tasteless, odorless, colorless gas that occurs naturally from the decay of uranium in the earth's rocks and soil. When the gas decays further, some of its elements attach themselves to dust particles and lodge in our lungs. When these elements decay, they emit bursts of energy that can cause lung cancer. Up to 30,000 deaths a year are attributed to exposure to radon in the U.S., the second highest cause of lung cancer behind smoking. Canada's figures are usually about one-tenth of U.S. figures. The gas seeps up through rock and soil and gets into our homes through cracks in the foundation, around water and sewer pipes and floor drains, or in well water. In upper floors where there is greater ventilation, the gas diffuses; but in finished basements where people sleep and eat, it is a greater problem. Normally radon is in such low concentrations that we can safely ignore it. However, when radon seeps into homes that are well sealed for energy efficiency the concentrations can rise to very dangerous levels. And this can occur anywhere. Fortunately, radon testing is easy and relatively inexpensive – many home inspectors conduct the test for around \$150. Moreover, most problems can be fixed without major expense. According to the EPA, most homes can be fixed for around \$1,200. They estimate that high levels of radon can be 99 percent solved for \$500 to \$2,500 – comparable to having a hot water heater installed or the house painted. Conducting the test and awaiting results can take about a week. A clean bill of health (from reassuring test results or actions taken as a result of alarming results) can extend lives and make your home ready for sale, if you're preparing for a move. As if to underscore how important it is to be aware of radon gas levels, in 1996 a Pennsylvania court found three real estate agents guilty of fraud and negligent misrepresentation and required them to pay \$10,000 each to a home buyer because they failed to disclose dangerous levels of radon gas.