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## Make indoor air quality test a standard part of real estate purchases

I've always found it strange that the organized real estate community in Ontario is still highly concerned about urea formaldehyde foam insulation (UFFI) in houses, years after it was proved that it carries no health risks, and yet radon gas and other environmental contaminants which exist in many homes and can be fatal are hardly ever mentioned in residential purchase agreements.

For several decades, the standard Ontario Real Estate Association agreement of purchase and sale has contained a warranty that the seller has not insulated the house with UFFI. This, despite the fact that 15 years ago a Quebec court ruled, after an eight-year trial, that there was no basis for fear of health risks and no justification for removing UFFI from houses.

Radon, on the other hand, has one known health risk exposure above certain levels increases the risk of developing lung cancer.

A detailed guide on [the website of Canada Mortgage and Housing Corp.](#), CMHC, explains that radon is a radioactive gas that is colourless, odourless and tasteless. It is formed by the breakdown of uranium, a natural radioactive material found in soil, rock and ground water.

When radon escapes from the ground into the outdoor air, it gets diluted and is not a concern.

But when it seeps from the ground into an enclosed, unventilated space like a house, it can sometimes accumulate to high levels and contaminate the inside air.

Back in the 1970s, Health Canada surveyed the radon levels of 14,000 homes in 18 cities across Canada. A small but significant minority of homes in some locations were found to have high levels of radon gas.

In Canada, the Radiation Safety Institute says that long-term exposure to radon causes about 2,000 deaths per year and is the leading cause of lung cancer among non-smokers.

In addition, it can greatly increase the chances that a smoker living in a contaminated house will acquire lung cancer.

Radon is measured in units called "becquerels per cubic meter (Bq/m<sup>3</sup>)," and the government of Canada's guideline limit for radon in indoor air is 200 Bq/m<sup>3</sup>. Even this figure is too high for the [World Health Organization](#), which last year published a handbook proposing a maximum indoor level of 100 Bq/m<sup>3</sup>.

[The City of Toronto website](#) advises residents that the only way to find out if a home contains radon is to have it tested.

I was able to locate a do-it-yourself radon gas test kit by Pro-Lab (1-800-427-0550, [www.prolabinc.com](#)) at Canadian Tire. The cost was \$9.99 plus a \$30 lab fee. The city of Toronto website suggests that kits may also be available from smaller retailers and online for about \$50 (Google: "radon test kit Canada").

Health Canada recommends a minimum three-month testing period to maximize accuracy and to be able to estimate the annual average level of indoor radon.

The most popular long-term radon detectors are known as electrets and alpha track detectors.

These devices are placed in a home and exposed to its air for a specified period of time. The testing kit is then sent to a laboratory for analysis.

As an alternative to the do-it-yourself kits, the City of Toronto also suggests that a trained environmental technician can conduct a test for indoor radon levels. This type of test may be more expensive than a passive kit, but the results would be available much faster.

If excess radon is detected in a house, Health Canada recommends that steps be taken to reduce radon levels. The cost is estimated at about \$2,500.

As more and more Canadians become aware of the dangers of radon in homes, it may become an important factor in sales transactions.

The typical home inspection does not test for environmental issues such as mould, asbestos, urea formaldehyde, or the telltale signs of a marijuana grow-op or meth lab.

Sooner or later and I hope it is sooner an indoor air quality test will become a standard part of real estate purchases, and the standard form agreements will contain warranties as to air quality.