

Occupational Cancer Research Centre



Radon in the Workplace

What is radon?

Radon is a radioactive gas found in many buildings across Canada. It is created naturally when uranium in the ground breaks down. Radon is invisible; you can't see it, smell it or taste it.

Which workplaces have radon?

Radon levels are more likely to be elevated in poorly ventilated workspaces, especially those located underground such as basements. Radon can seep into buildings through cracks in the foundation, pipe openings, and other places where the building contacts and is open to the ground. In confined indoor spaces, radon can build up to high levels and become a health risk. The only way to know how much radon is in a workplace is to test.

What are the health risks?

Radon is the 2nd leading cause of lung cancer after smoking. An estimated 190 lung cancers diagnosed each year in Canada and 60 lung cancers in Ontario are due to exposure to radon in the workplace. Exposure to radon in homes contributes to an estimated 16% of all lung cancers, and 3,200 lung cancer deaths in Canada peryear (and an estimated 850 lung cancer deaths in Ontario). Assessing levels of radon in the workplace is important because when individuals are exposed to radon at home AND in the workplace, they have a greater risk of lung cancer. People who are exposed and also smoke have an even higher risk.

The health risk from radon is long-term. The longer you are exposed to high levels of radon, the greater your risk.

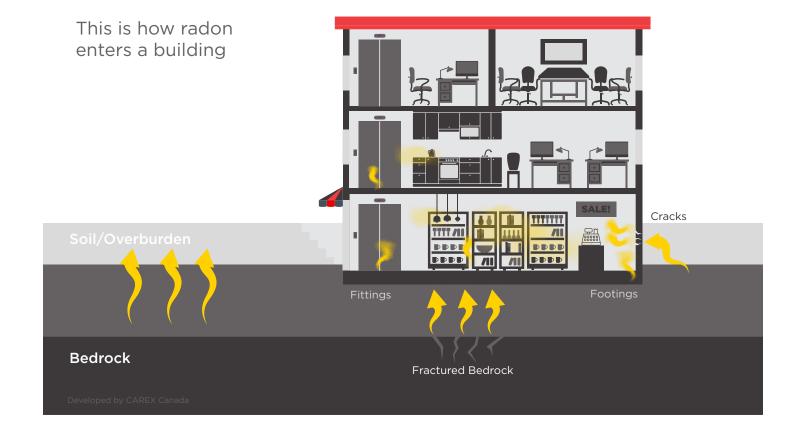
How do I test my workplace for radon?

Testing for radon is easy and inexpensive. Radon in buildings can be tested by certified radon professionals or with long-term test kits. These kits are safe and easy to use –the radon detector is set up, left for a minimum of three months, and then sent to a laboratory for analysis. To find a certified professional or test kit supplier in your area, go to: http://www.c-nrpp.ca.

My workplace tested above Health Canada's guideline. What now?

The current Canadian guideline for radon is 200 becquerels per cubic meter (200 Bq/m³). You should always try to reduce levels to as low as possible since there is a risk of lung cancer even at low levels. The higher the radon level in your workplace, the sooner it needs to be fixed.

Techniques to lower radon levels are effective and can help reduce the number of lung cancers in Canada. Measures to reduce radon include sealing cracks in the foundation, modifying the heating and cooling systems of the building to improve ventilation, and venting radon from the soil beneath the building outdoors. You can hire a radon mitigation professional who has been certified under the Canadian National Radon Proficiency Program (C-NRPP) to help find the best way to reduce the radon level in your workplace.





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