



WHAT IS RADON?

Radon is an invisible, odourless, naturally occurring radioactive gas. Radon can enter homes, schools and other buildings through foundation cracks and similar unsealed openings.

IF I CAN'T SEE OR SMELL RADON, HOW DO I KNOW IT'S THERE?

Using specialized instruments, our expert staff can detect its presence and tell you.

WHERE DOES RADON COME FROM?

Radon is a product of the radioactive breakdown of uranium, which is a common, naturally-occurring part of the Earth's crust.

HOW DO YOU FIND OUT IF YOU NEED TO TEST FOR RADON?

Radon levels vary significantly from hour to hour, day to day. But they also vary according to geography and season. There is no reliable method to predict radon levels in your home. The only sure way to know is to test your home.

RADON IN YOUR HOME

What's the key to protecting your family?

GETTING TESTED

How does radon gas enter homes?

Because it is a gas, radon travels up through cracks in the earth's surface and through spaces in soil. It can then enter your home through cracks in the foundation walls and floor of your basement, through openings around drain pipes and sump pumps, and through any other unsealed openings near soil and rocks around your home.

Why is the presence of radon a concern?

When radon enters a confined or enclosed space in your home – such as a basement or crawl space – it can build up over time and lead to very high concentrations of the gas.

"The only known health risk associated with exposure to radon is an increased risk of developing lung cancer. The level of risk depends on the concentration of radon and length of exposure."

Health Canada, *Guide for Radon Measurements in Residential Dwellings*, 2007 (emphasis added)

What is the health risk associated with high radon levels?

Radon gas decays into radioactive particles that can get trapped in your lungs when you breathe.

As they continue to decay, these particles release small bursts of energy which can damage your lungs and can increase your long-term risk of developing lung cancer (especially if you smoke). Please note that not everyone exposed to elevated levels of radon will develop lung cancer.





HOW LONG DOES A RADON TEST LAST?

Since radon levels change from hour to hour and from day to day, the radon test provides an estimate of the average level of radon in your home. Radon tests can be as short as two days and as long as a year. The longer the test, the more accurate the estimate of the average annual level. Health Canada recommends testing for at least three months.

WHEN SHOULD YOU TEST YOUR HOUSE FOR RADON?

It is recommended that you test during the heating season (approximately October to April). Radon levels are generally highest during this time.

SERVICES AVAILABLE

Professional and Workplace Training

Worker Dosimetry (Personal Alpha)

Radiation Safety Awareness

Home Radon Monitoring

Electromagnetic Field (EMF) Surveys

Leak Testing of Sealed Sources

Instrument Calibration

What should you do if your home has high radon levels?

The guideline established by Health Canada recommends an action level of 200 Bq/m³ (becquerels per cubic metre of air).

If your home radon test reveals levels of 200 Bq/m³ or higher, both Health Canada and the Radiation Safety Institute recommend that you take steps to lower these radon levels.

Known as “remedial actions”, these steps don’t have to be expensive. Simple remedial actions you can take today may include:

- Sealing cracks in the foundation or at the wall/slab joint. Look also for any openings around pipes or cables entering the wall below grade.
- Improving ventilation in your house, especially in those confined spaces close to rocks and soil.
- Ensuring that if you have a sump pump it is properly sealed.



About the Institute

The Radiation Safety Institute of Canada is an independent, national organization dedicated to the promotion of radiation safety in the workplace and in the environment. The Institute is known for the quality and effectiveness of its educational, technical and consultative services in radiation safety and in testing for radon in homes, schools and other buildings.

We are committed to the principle of “good science in plain language[®].” If you have any questions or concerns about radon in your home, please contact the Institute directly by any of the methods listed below.

National Education Centre: (416) 650-9090

National Laboratories: (306) 975-0566

Information Hot line: 1-800-263-5803

E-mail: info@radiationsafety.ca

Website: www.radiationsafety.ca



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