

#### Disclaimer:

Radon Control does not provide any warranty, expressed or implied, for the consequences of erroneous test results. There can be some uncertainty with any measurement due to statistical variations, extreme weather changes, operation of the building and other factors. Radon Control shall not be liable under any charge or claim for losses, claims, charges, fees, demands, expenses, or damages resulting from a radon test. Results are based on assumption that all instructions were strictly followed during the testing period and all information supplied by client are truthful. These results cannot anticipate or address every condition that arises when performing a radon test. Some provinces have specific regulations regarding radon testing. If you have questions about your province's requirements please contact Health Canada.

# Tested Property:

Name:	Your Name
Street:	Your Adress
City, Province:	City, Province
Postal Code:	Postal Code

#### Radon Health Risk Information

Radon is a colourless, odourless gas that is found in soil, rocks and water. It is a product of the decay of uranium and is found throughout the earth's crust. As a gas, radon moves freely through the soil and when radon reaches the atmosphere it is diluted to low levels and does not pose a significant health risk. However, when radon is trapped within a building and can't escape it can be a very serious health risk to occupants. Radon has been identified as the second leading cause of lung cancer in Canada. Health Canada estimates as many as 16 percent of lung cancer deaths can be attributed to radon exposure.

Most of the lung cancer risk posed by radon happens where people spend much of their time – in their homes. A high concentration of radon in a home and exposure over many years increases the health risk from radon. Smoking also increases the health risk of radon. Individuals that smoke (or have smoked) and are exposed to high levels of radon have an increased risk of developing lung cancer.

## Radon Measurement & Guidelines

Radon is measured in becquerels per cubic metre of air (Bq/m3). A becquerel measures the amount of radioactivity decay in radon gas. Health agencies have set out guidelines on the Bq/m3 exposure levels that are deemed to present a public health risk.

Health Canada's radon exposure guideline is 200 Bq/m3. The US Environmental Protection Agency's guideline is 148 Bq/m3. The World Health Organization set its guideline for action at 100 Bq/m3. This suggests strong international scientific consensus within a narrow guideline range that action should be taken to reduce radon levels to below this range.

#### Your Results

Device ID	Tested Room	Start Date	End Date	Total Days
		1. Dec. 2015	31. Dec. 2015	30

Your Result	100	Bq/m3
Health Canada's Guideline	200	Bq/m3
US EPA's Guideline	148	Bq/m3
WHO's Guideline	100	Bq/m3



#### Source of Radon

Radon concentrations differ greatly throughout Canada but are usually higher in areas where there is a high concentration of uranium in underlying rock and soil. Radon is found in every house, but concentration levels will vary from one house to another, even if they are similar and next door to each other.

The most common source of radon is the soil beneath your house. Radon can enter a house any place it finds an opening where the house contacts the soil: cracks in foundation walls and in floor slabs, construction joints, gaps around service pipes and support posts, floor drains and sumps, cavities inside walls, and the water supply.

Less common but not rare source of radon can be drinking water. Radon in water usually originates in water wells that are drilled into bedrock containing radon gas. These wells could be private water wells or wells that are utilized by a public water supply system. Radon usually does not occur in significant concentrations in surface waters.

In very rare cases building materials can contribute to high radon concentrations. Granite used to produce commercial products, such as countertops, can contain varying amounts of uranium. Some granites could contain more natural uranium than others, and thus possibly show higher than expected radiation or radon levels, however, in the vast majority of cases, these levels are not expected to be significant.

## Accuracy of your results

Radon levels in a home change significantly over time. They can rise and fall from one hour or day to the next and seasonally. Radon concentrations are usually higher in winter than in summer, and are usually higher at night than during the day. This is because the sealing of buildings (to conserve energy) and the closing of doors and windows (at bedtime). For this reason, measurements taken over a longer period of time are more accurate.

Placing the radon detector in the kitchen, laundry room, bathroom, crawl spaces, close to the floor or next to the sump pump could cause a false high reading.

To provide a realistic estimate of the radon exposure of the occupants, all measurements should be made in the normal occupancy area of the lowest lived-in level of the house. The normal occupancy area is defined as any area occupied by an individual for more than 4 hours per day.

Our devices are equipted with On/Off switch to prevent contamination during the transport. However, delay between end of testing period and return to the lab may result in false high reading. In general, the device should be deployed immediatly after delivery (no later than 30 days after calibration) and send back righ after test is finished.

### How can I reduce the amount of radon in my house?

Radon levels in most homes can be reduced below 100 Bq/m3 for about the same cost as other common home repairs such as replacing the furnace or air conditioner.

Techniques to lower radon levels will depend on many factors. The most common and effective radon reduction method is Active Soil Depressurisation (ASD); a method where a hole is drilled in your basement floor and a pipe is installed with a fan that draws the radon gas from under your house and pushes it outside. ASD is typically performed by a contractor.