

RADON INFORMATION SHEET FOR HOME BUYERS

WHAT DO HOME BUYERS NEED TO KNOW ABOUT RADON?

Radon is a radioactive, colorless, odorless, tasteless noble gas that occurs when naturally occurring radioactive elements in the soil decay. Long-term exposure to radon gas is the second leading cause of lung cancer after smoking and the leading cause of lung cancer for non-smokers. Outdoors, radon does not present any health concerns, because as it rises from the ground it is diluted to low concentrations. However, when radon enters an enclosed space, like a house, it can accumulate in high levels and become a health hazard. Radon is present in all provinces and territories in Canada, and levels vary across the country.

In Nova Scotia, 8.8 per cent of homes have unsafe levels of radon. The Department of Natural Resources created a [Radon Risk Map](#) that shows high-, medium-, and low-risk areas. Tests show that 40 per cent of buildings in the high-risk areas exceed the radon guideline. In the medium-risk areas, 14 per cent of buildings exceed the guideline and in the low-risk areas five per cent exceed the guideline. This tells us that even homes in low risk areas should be tested.

HEALTH CANADA RECOMMENDS TESTING FOR THREE MONTHS IN COLD WEATHER

Health Canada recommends that houses be tested for a minimum of three months, ideally between September and April when windows and exterior doors are kept closed allowing radon levels to build up. Radon levels in a home can vary a lot from hour to hour and day to day, so the most accurate way to find out if you have a problem is to measure radon levels in your home for at least three months.

Radon testing is easy and inexpensive. There are two options: purchase a do-it-yourself test kit or hire a radon measurement professional. Do-it-yourself kits include instructions on how to set up the test and submit the results for analysis. Radon test kits can be purchased by phone,

online, or from home improvement retailers. The cost of testing ranges from \$25 to \$75. For professional testing, Health Canada recommends consulting with a contractor certified by the Canadian National Radon Proficiency Program (C-NRPP). Radon-testing professionals are located throughout Canada and a list of professionals can be found on their website: c-nrpp.ca or by calling 1-855-722-6777.

ACCEPTABLE RADON LEVELS

According to Health Canada, the acceptable level of radon in the average home is 200 becquerels per cubic metre (Bq/m³), while the World Health Organization sets the acceptable level at 100 Bq/m³. For radon levels above the Canadian guideline of 200 Bq/m³, Health Canada recommends that you take action to lower the levels. The higher the radon concentrations, the sooner action should be taken to reduce levels to as low as practically possible. While the health risk from radon exposure below the Canadian guideline is small there is no level that is considered risk free. It is the choice of each homeowner to decide what level of radon exposure they are willing to accept.

HOW TO LOWER RADON LEVELS

If the radon levels in your home are higher than the Canadian guideline of 200 Bq/m³, you can take steps to mitigate the levels. Techniques to lower radon levels are effective and can save lives. Sub-slab depressurization (also called active soil depressurization) is the most effective and reliable radon reduction technique. It is the most common method used by C-NRPP certified professionals.

This method involves installing a pipe through the foundation floor slab and attaching a fan that runs continuously to draw the radon gas from below the home and release it into the outdoors where it is quickly diluted. This system also reverses the air pressure difference between the house and soil, reducing the amount of radon that is drawn into the home through the foundation.

WHAT ARE MY OPTIONS AS A BUYER?

Residential real estate transactions occur all year long and the majority of properties change hands in less time than it takes to do a long-term radon test. Due to time it takes to perform radon testing, there are options you and your licensee can discuss. Find out if the home has been previously tested for radon gas by a professional. If yes, request a copy of the test results. If the home has not been tested, or the results of a test are above 200 Bq/m³, then you may want to proceed with one of the following options:

1. Consider a purchase price that reflects how much a radon mitigation system will cost. The issue is then handled through the price negotiation.
2. Make your offer conditional on the completion of a radon test. Specify in the agreement who is to conduct the test.
3. Add a clause stating that the seller agrees to put a negotiated amount in trust with the buyer's lawyer towards the cost of a radon monitoring report, and/or the cost of mitigation should the testing have to be completed after the sale closes, with funds only dispersed after documentation of the mitigation being completed. This clause may cause concern with some financial lenders. If radon testing is not above 200 Bq/m³, the balance of funds in trust would then be returned to the previous homeowner.

The Canadian–National Radon Proficiency Program (C-NRPP) and the Canadian Association of Radon Scientists and Technologists (CARST) agree with Health Canada's recommendations that homeowners use a long-term test—conducted over a minimum of three months during the fall or winter months. Indoor radon levels fluctuate day-to-day, depending on the season. A three-month test is more accurate and representative of a person's annual average exposure and should be used to determine if the radon concentration of the home exceeds the Canadian guideline of 200 Bq/m³. While short-term tests exist, longer-term tests provide a more representative annual average for radon exposure.



HOW CAN I FIND OUT MORE?

Interactive Radon Map of Nova Scotia:
<https://bit.ly/2nZT1Yz>

Take Action on Radon:
<http://www.takeactiononradon.ca/>

Health Canada Radon brochure:
<https://bit.ly/2XTb0B8>

Health Canada Radon FAQs:
<https://bit.ly/2uZFPYu>

Health Canada Radon Reduction Guide for Canadians: <https://bit.ly/2vpB3oC>

Government of Canada Health Risks website:
<https://bit.ly/2GesstT>

Radiation Safety Institute of Canada:
<https://bit.ly/2JCiPrK>

The Canadian Lung Association:
<https://bit.ly/30xEjLo>

The Canadian National Radon Proficiency Program (C-NRPP) includes a directory of certified individuals in five different service areas involving radon, including radon measurement professionals and radon mitigation professionals:
<https://bit.ly/32qr6Ws>

Where to find a do-it-yourself long-term radon test kit:
<https://bit.ly/2JygfCo>

Government of Canada—hazards in your home:
<https://bit.ly/2lrKWWQ>