Canadian Cancer Society / Société canadienne du cancer

RADON: IS IT IN YOUR HOME?

You may have heard about the harmful health effects of radon gas, but did you know that Manitoba has some of the highest rates of elevated radon in homes and buildings in Canada?

WHAT IS RADON?

Radon is a radioactive gas that occurs naturally when the uranium in soil and rock decays. It is invisible, odourless and tasteless. When radon is released from the ground outside it mixes with fresh air and gets diluted resulting in concentrations too low to be of concern. However, in enclosed spaces, like homes, it can reach high levels and become a health risk to you and your family. Radon enters enclosed spaces through any opening where the house contacts the soil, including cracks in foundation walls and in floor slabs, gaps around service pipes, window casements, floor drains, or cavities inside walls.

HOW CAN RADON AFFECT MY HEALTH?

Scientific studies show that radon is the second-leading cause of lung cancer after smoking. **Health Canada links 16 per cent of lung cancer cases among Canadians to radon exposure**. If you are a smoker (or exposed to second-hand smoke) and exposed to a high level of radon, your risk of getting lung cancer is one in three. If you are a non-smoker, your lifetime lung cancer risk at the same high radon level is one in 20. In both cases, your risk can be reduced by taking steps to mitigate radon entry.

HOW DO I KNOW IF I HAVE RADON IN MY HOUSE?

The only way to know is to test. All homes and buildings have some radon; the question is how much? Radon levels in two homes built side-by-side can be different for various reasons, including construction practices, the condition of the foundation, and the lifestyle tendencies of a homeowner. Any air pressure change, such as how often you use the bathroom and kitchen exhaust fans, how much you like to open windows, and which heating source you rely on, can impact radon levels.

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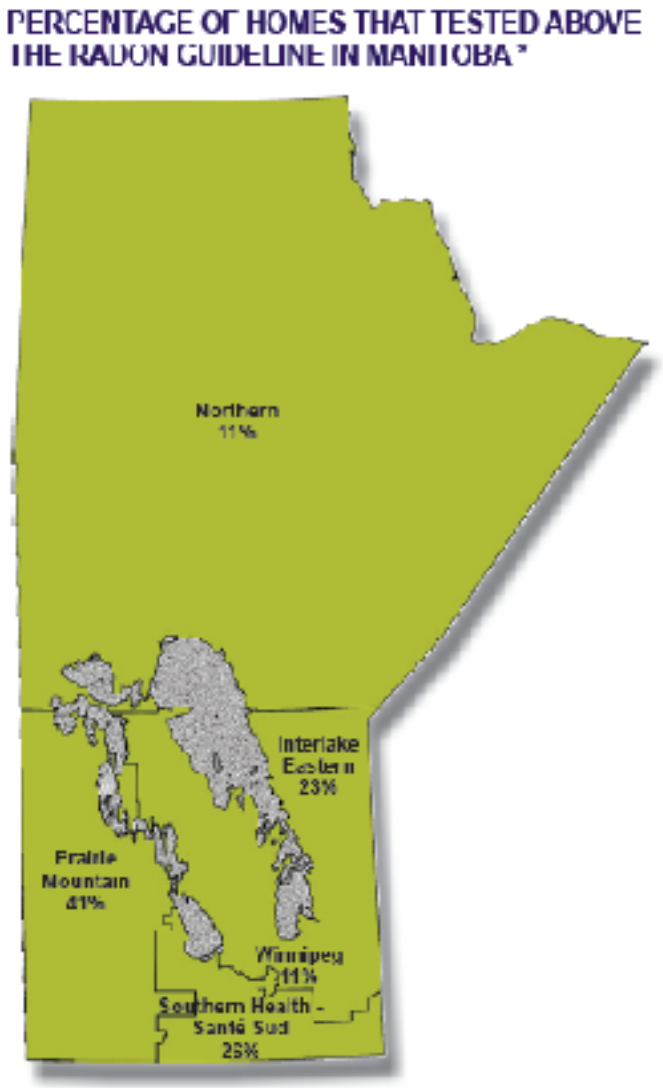
WHAT ARE THE RATES OF RADON IN MANITOBA HOMES?

Radon concentrations differ greatly throughout Canada but are usually higher in areas where there is high concentration of uranium in underlying rock and soil. Manitoba has some of the highest levels in the country.

Based on Health Canada's 2012 Cross-Canada Survey of Radon Concentrations in Homes report, 19.4 per cent of homes in Manitoba are estimated to be above the radon guideline of 200 becquerels per cubic metre (200 Bq/m^3). In comparison, the Canadian average is seven per cent. The map will give you an idea of the percentage of homes that tested above the radon guideline in your region. But it cannot be stressed enough, the only way to know how much radon is in your house is to test.



*Source: Based on 2011 Cross Canada Survey of Radon Concentrations in Homes

HOW DO I TEST FOR RADON?

Radon test devices can be purchased from your Canadian Cancer Society Representative or by calling 1-888-532-6982. Please be sure to read and follow the directions included in the test kit. Health Canada recommends placing the detector in the lowest level of your home that is occupied for at least four hours per day. Testing for a minimum of three months is considered long-term and will better represent your annual average exposure to compare to the guideline.

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You can also hire a certified radon measurement professional to complete the test. Health Canada recognizes the Canadian certification program, Canadian National Radon Proficiency Program (C-NRPP). Lists of certified Canadian measurement and mitigation professionals are available through **C-NRPP**.

HOW DO I FIX MY RADON PROBLEM?

There are a number of ways to reduce radon in your home, but the most common and effective way is by installing an active soil depressurization system, which uses a pipe in contact with the soil and a radon fan to move the gas outside before it forces its way into your home. Airtight seals on exposed soil, sump pits, floor drains, floor-to-wall joints and other openings in contact with the soil are important steps to an effective system.

If your house tests over the guideline (200 Bq/m^3) Health Canada recommends contacting a **C-NRPP certified radon professional** to determine the most effective way to reduce the radon level in your home.

WHERE CAN I FIND MORE INFORMATION?

Visit www.cancer.ca/radonmb or contact your Canadian Cancer Society Representative:

Sharon Mulder, Interlake Regional Rep, Canadian Cancer Society, Tel: (204) 276-2664 or email: smulder@mb.cancer.ca