

How can I test radon levels in my home?

Contact your local home safety equipment retailer for information about testing units. Be sure to follow the instructions carefully for accurate results.

Will high levels of radon affect the value of my house?

Where a high radon level is detected, it can most often be successfully reduced at a cost which is usually small when compared to the value of the house.

I am interested in buying a house. How can I find out if the radon level has been measured?

You can ask if the house has been tested for radon. If you cannot be sure then you can request that it be tested.

What methods can be used to reduce the radon levels in a dwelling?

The methods used to reduce radon levels in a dwelling can vary considerably depending on the characteristics of the dwelling, the radon level and the radon entry points. It could be as simple as an owner closing entry points to the dwelling, or, more comprehensive measures may be required that need the services of a qualified contractor.

Where can I learn more?

For more information about testing, “*Radon Testing in Nova Scotia: Guidelines and Resources*” can help. To obtain this publication, or find out more, please contact the Nova Scotia Department of Environment and Labour at 902-424-5300 (toll free: 1-877-9ENVIRO) or visit us at <http://www.gov.ns.ca/enla/>. To obtain a copy of *Radon – A Guide for Canadian Homeowners* call 1-800-668-2642.

Other brochures in this series:

Radon in Nova Scotia's Drinking Water

Radon Testing in Nova Scotia: Guidelines and Resources

Understanding Radon in Nova Scotia's *Indoor Air*



What is radon?

Radon is a radioactive gas that is formed when uranium breaks down naturally. It has no colour, odour, or taste. Radon is slowly released from the ground, water, and some building materials that contain very small amounts of uranium, such as concrete, bricks, tiles and gyproc. When radon is released to outdoor air, it is diluted by the atmosphere and is not a concern. However, in enclosed spaces, like dwellings, it can sometimes accumulate to high levels.

What are the health effects of radon?

The only known health risk associated with exposure to high levels of radon in indoor air is an increased lifetime risk of developing lung cancer. This is because radiation from inhaled radon gas can damage cells in the lungs. The effects depend on the levels of radon and how long a person is exposed to these levels. The Canadian guideline is based on an exposure period of about 70 years spent in a dwelling that contains elevated levels of radon 75% of that time.

Exposure to radon and tobacco use together can significantly increase your risk of lung cancer, however, not using tobacco products remains the most effective way to reduce the risk of lung cancer.

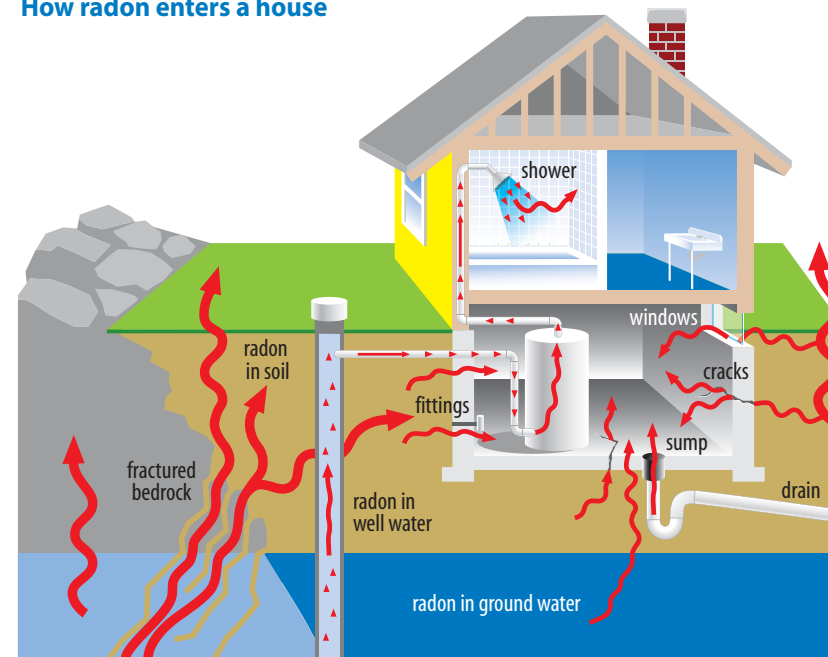
What is the current Canadian guideline for radon in indoor air?

The current Canadian guideline for radon in indoor air for dwellings is 200 Becquerels per cubic metre (200 Bq/m³). The Becquerel is a unit that describes one radioactive disintegration per second. Individual dwelling owners may wish to reduce radon levels as much as they reasonably can, using methods they find affordable and practical. However, the level in a dwelling should not be above the Canadian guideline of 200 Bq/m³.

Are there certain parts of Nova Scotia that have higher levels of radon than others?

Within the province, areas that have certain types of rock (shale and granite) and soil can have higher levels of uranium in the ground and likely more radon. This is also true of most other Canadian provinces. A radon test for an individual building is the only way to tell for certain whether radon is present.

How radon enters a house



How does radon get into dwellings?

Because radon is a soil gas it can enter a dwelling through any opening that contacts the soil around or underneath the building. For example, it can seep in through cracks or holes in basement floors or walls, including openings for utility connections, and through hollow support posts. If there is radon in the dwelling's water supply, radon can also enter the space via running tap water. Both old and newer structures can have elevated levels of radon.

I am building a new house, can I have the site tested for radon?

Although techniques are available for measuring radon levels in soil, it is difficult to determine what the radon level in a new house will be from the results of soil measurements. For this reason, site radon measurements are not a reliable means of predicting, before construction, whether a building will have a high radon level.

Is anything being done to prevent radon problems in new houses?

Yes. In 1995, the National Building Code introduced measures to prevent soil gas from entering homes. This building code was updated in 2005. Radon is considered a soil gas.

Increasing the ventilation and closing entry points, especially on the ground floor, may reduce the indoor radon levels. However, the reduction may only be small and alternative methods of radon reduction may be required, particularly if the initial radon level was very high.

Where in the house should radon testing be carried out?

The highest concentration is most likely to occur in basements and lower floors, especially if those areas have poor ventilation. A radon test should be carried out in lower level rooms of dwellings where the occupants spend the most time, such as bedrooms or living rooms.

How can I decide whether my house should be tested?

House construction methods and materials can affect the radon level, however, radon will be present in varying amounts in all types of houses. Because radon enters a building from the ground, the upper floors of a multi-story building usually have lower radon levels than the ground floor.

Radon levels vary from house to house, so your neighbour's test results should not be used to make decisions about your house. The only way of knowing the radon level in your house is to have it tested, whether your house is new or old.

It is possible to perform an instant radon test, but the result will not give a reliable indication of the average radon level. Due to the variation in radon levels from day to day, the longer the test period, the more reliable the results of the test.

Who pays for radon testing in Nova Scotia?

Testing is the responsibility of the building owner. Homeowners are responsible for the cost of radon testing in their own homes.