

Prepared by the Town of Halton Hills: For Information Purposes Only – July 2023

Radon

Radon is an invisible, odourless, naturally occurring gas found in soil. Radon is a radioactive gas that comes from the breakdown of uranium in soil and rock. It seeps into homes through cracks in floors, walls and foundations – access points are mainly found in basements.

Since radon is naturally occurring, it's found in just about every home. However, high concentrations of radon gas in a home may pose health risks. The level of concentration of radon gas in a home is dependent on a number of factors, but a key factor is the composition of the soil on which the home sits. Radon concentrations vary across geographic regions and are usually higher in areas with large amounts of uranium in the ground. As a result, radon levels can vary between neighbouring homes and from community to community.

The only way to know how much radon is in a home is to test for it. Health Canada says that people exposed to radon levels in excess of 200 Becquerels per cubic meter over long periods of time have a higher risk of developing cancer. Becquerels are a unit of measurement for radioactivity.

Health Canada

As a health risk, radon is a responsibility of public health agencies. In 2020, Health Canada flyers were distributed to homes in the Town of Halton Hills. That flyer was also on the Health Canada website and it raised awareness and promotes home testing (distributed in part due to COVID-19). As noted in the Health Canada material, it is the responsibility of the homeowner to test for radon and ultimately, the homeowners responsibility for any mitigation measures. Health Canada information and recommendations for radon testing may be found at their website: <https://www.canada.ca/en/health-canada/services/health-risks-safety/radiation/radon/take-action-on-radon.html>.

Ontario

- Public Health Ontario (a provincial government agency) has information on radon risks and realities: <https://www.publichealthontario.ca/-/media/documents/o/2014/ohp-radon.pdf?la=en>
- Cancer Care Ontario (part of Ontario Health, a provincial government agency) has provincial data on radon: <https://www.cancercareontario.ca/en/cancer-facts/risk-residential-radon-exposure-varies-geographically>.
- Tarion (administers the Ontario New Home Warranties Plan Act) provides coverage under the new home warranty program in Ontario if excessive radon levels are found in a new home. “If your home is less than seven years old and a long-term radon test of at least three months indicates levels higher than 200bq/m³, there is help available for you. Your new home warranty provides radon remediation coverage for seven years from the original possession date, and the maximum coverage was recently increased to \$50,000 for homes who have a signed Agreement of Purchase and Sale after February 1, 2021. Report the situation to your builder and Tarion on

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the applicable warranty claim form. Your builder is required to take appropriate measures to reduce the radon in your home to an acceptable level. And if your builder fails to take action, then Tarion will step in to help.” (Source: <https://www.tarion.com/media/eight-quick-facts-about-radon>)

Halton Region

- Halton Region Health Department has information on their website: <https://www.halton.ca/For-Residents/Environmental-Health/Indoor-Air-Quality/Radon> including an info-graphic on radon awareness in Halton Region: <https://www.halton.ca/Repository/Radon-Awareness>

Town (Local)

- The Ontario Building Code (OBC) has specific requirements for soil gas control (including radon) in specifically identified municipal jurisdictions and any other areas where radon levels can typically exceed health guidelines – these jurisdictions do not include Halton Hills. The OBC has standards for soil gas control for construction where soil gas/radon is known to be a problem. The mitigation measures include two principal methods of excluding radon from homes: either by sealing the interface between the soil and the occupied space or ensuring that the pressure difference across the soil/space interface is towards the outside so that inward soil gas flow will be prevented. In a circumstance where it would be necessary to implement radon mitigation measures a Building Permit would be required for the installation to ensure that it meets the standards set out in the OBC. (*OBC Reference: Article 9.13.4.1., of Division B, and Supplementary Standard SB-9 “Requirements for Soil Gas Control”*)