

RADON

Purpose: This bulletin describes the practice standards with respect to the detection, disclosure, and remediation of radon gas when trading in real estate or providing property management services.

This bulletin applies to real estate brokerages, brokers, associate brokers, and associates.

Radon is an odourless, tasteless, colourless radioactive gas that is the by-product of radium decay. Radium occurs naturally in soil and rock formations. Places with higher than normal radium deposits, such as Alberta and Saskatchewan, have higher radon levels. Health Canada indicates concentrations of radon gas at or in excess of 200 becquerels per cubic metre are unhealthy, unsafe, and are considered 'maximum acceptable' in Canada.

Radon is typically drawn up from the earth and into basements, where it can become trapped because of the efficient way homes are sealed from the outside elements.

Prolonged exposure to radon elevates relative lifetime risk of lung cancer. In fact, an increased risk is evident at doses exceeding 100 becquerels per cubic metre, and while 200 becquerels is considered maximum allowable, the formal advice from Health Canada is to pursue 'As Low As Reasonably Achievable' radon levels in homes (the ALARA principle).

Radon tends to be a bigger issue in 1, 2, and 3-story single-family homes, condos, and townhouses, and is greatest in the ground and basement floors. Radon levels are typically lower in the upper floors of an apartment building, unless air circulates through the building from below ground or ground level.

The offer, negotiation, acceptance, and condition removal phase of residential real estate transactions rarely provides enough time for a reliable radon test. Reliable radon tests take 90 days or more, should be conducted in winter heating months (October to the end of April), and the measurement device must be specifically placed according to Canadian National Radon Proficiency Program (C-NRPP) standards.

The good news is radon gas is a solvable problem. Mitigation costs vary, but even the most expensive solution is often not more than \$2,000 to

\$3,000 for a typical residential property, and are effectively permanent solutions. It is even possible to solve some radon problems with only a few hundred dollars.

Radon in residential real estate

While a typical residential real estate transaction does not provide enough time for testing for radon, there are still things residential real estate professionals can do to bring radon awareness into the picture.

When representing sellers

- discuss the implications of unhealthy concentrations of radon gas with sellers.
- provide sellers with radon-related information such as the *Radon – Reduction Guide for Canadians* and the *Radon – A Guide for Canadian Homeowners* from the Health Canada, or *A Homeowner’s Guide to Radon* from the Canadian Real Estate Association.
- ask if the sellers have tested their home for the presence of radon gas
- if sellers have tested, ask for a copy of the test results.
- if results show less than 100 becquerels per cubic metre, this may be a selling feature, as this home has a naturally low radon level that is below any international health reference level.
- if results show 200 becquerels per cubic metre or higher, and the seller has done nothing to mitigate the radon gas, this is a material latent defect and you must disclose the defect to potential buyers. If the seller instructs you not to disclose the high concentration of radon gas, you must refuse to provide further services to or on behalf of the seller.
- if results show 200 becquerels per cubic metre or higher, and the seller hired a C-NRPP certified professional to remediate the home, this will likely appeal to prospective buyers. Ask the seller about the type of remediation, and request evidence the work was completed (i.e. names of service providers, receipts, details of any follow up radon gas testing, etc.).
- if the sellers have not tested, talk to them about different approaches buyers may take in order to prepare them in advance of any offers.

When representing buyers

- discuss the implications of unhealthy concentrations of radon gas with buyers.
- ask the seller’s representative if the sellers have tested their home for radon gas, and ask for information about the radon test they used.
- if sellers have tested, ask for a copy of the test results.
- if results show less than 100 becquerels per cubic metre, this may be a selling feature. If the results are 100 to 200 becquerels per cubic metre, the buyer may still want to arrange remediation if they

purchase the home. American buyers will typically be dissatisfied with any level near or above 148 becquerels per cubic metre, as this is the maximum acceptable radon guideline for the United States.

- if results were 200 becquerels per cubic metre or higher, and the seller hired a C-NRPP certified professional to remediate the home, this will likely appeal to buyers. Ask the seller's representative about the type of remediation, and request evidence the work was completed (i.e. names of service providers, receipts, details of any follow up radon gas testing, etc.).
- if results show 200 becquerels per cubic metre or higher, and the seller has done nothing to mitigate the unhealthy concentration of radon gas, you must give this information to the buyers and ask for further instruction. The buyers may wish to estimate the cost of remediation and reduce their offer to offset some or all of that amount.
- if the sellers have not tested, inform the buyers of different approaches they may consider – ask the buyers for further instruction and ensure you carry out their instruction, if any. Among other options, they may:
 - tell you they are not interested in this particular home and they wish to seek out alternative properties.
 - proceed with an offer to purchase.
 - proceed with an offer to purchase and ask you to draft a holdback term for the offer that contemplates reliable testing and remediation, as necessary (be certain to provide an alternative in the event the seller does not agree to a holdback provision).
- if a buyer is planning to do substantial renovations to the property after buying it, it is important to tell them that a previous radon test result will no longer be valid following the renovations. Major alterations to the home, for example, exchanging a furnace/HVAC system, insulation, flooring, windows, roof, adding/removing walls, or developing a basement, will alter how radon is drawn into and retained within the home. Radon levels may go up or down following renovations.
- if the buyers are renovating before or soon after moving in, it is less important for the seller to provide a radon reading to a potential buyer if one is not already available – *however*, if the sellers completed a radon test that shows 200 becquerels per cubic metre or more and they have not done remediation, the sellers need to disclose it as a material latent defect regardless of the buyers' eventual plan for the property.

Property management

When representing residential landlords:

- discuss the implications of unhealthy concentrations of radon gas with landlords.
- provide landlords with radon-related information such as the *Radon – Reduction Guide for Canadians* and the *Radon – A Guide for Canadian Homeowners* from the Health Canada, or *A Homeowner’s Guide to Radon* from the Canadian Real Estate Association.
- property managers may have a formal requirement to discuss radon with their landlord clients as tenant health is a legal matter under the *Public Health Act* and *Residential Tenancies Act*.
- ask the landlord if they have tested the property for the presence of radon gas.
- if the landlord has tested, ask for a copy of the test results
- the Health Canada standard for radon gas is that 200 becquerels per cubic metre or higher is dangerous, and Health Canada considers it the maximum acceptable.
- if results show 200 becquerels per cubic metre or higher, and the landlord hired a C-NRPP certified professional to remediate the home, this will likely appeal to tenants. Ask the landlord about the type of remediation, and request evidence the work was completed (i.e. names of service providers, receipts, details of any follow up radon gas testing, etc.).
- if results show 200 becquerels per cubic metre or higher, and the landlord has done nothing to mitigate the unhealthy concentration of radon gas, this is a material latent defect and you must disclose it to tenants. If the landlord instructs you not to disclose, you must refuse to provide further services to or on behalf of the landlord.
- if the landlord has not tested, inform them of the different approaches they may take towards detection and, if necessary, mitigation.

When representing residential tenants

- discuss the implications of unhealthy concentrations of radon gas with tenant.
- provide tenants with radon-related information such as the *Radon – Reduction Guide for Canadians* and the *Radon – A Guide for Canadian Homeowners* from the Health Canada, or *A Homeowner’s Guide to Radon* from the Canadian Real Estate Association.
- ask the landlord or the landlord’s representative if the landlord has tested for radon gas concentrations in the home.
- if the landlord has tested, ask for a copy of the test results
- the Health Canada standard for radon gas is 200 becquerels per cubic metre.
- results showing 200 becquerels or higher are above the Health Canada standard for radon gas and indicate a dangerous concentration of radon gas.

- if the landlord has not tested for radon, talk to the tenants about their options. They may:
 - tell you they are not interested in this property
 - proceed with an offer to lease (possibly with a term or condition related to radon testing and remediation)

There is nothing to prevent a tenant from doing their own radon testing and using the provisions under the *Public Health Act* and *Residential Tenancies Act* if the radon gas concentrations in the rental premises exceed 200 becquerels per cubic metre. Because legislation requires landlords to provide a safe premises, if the results are high, Alberta Health Services and other provincial government agencies may require the landlord to remediate the property.

Commercial real estate

Radon gas may be an issue for commercial real estate located on the ground floor or below the ground floor. While the *Public Health Act* and *Residential Tenancies Act* may not apply, commercial real estate professionals have the same responsibilities as residential real estate professionals. Because commercial real estate transactions typically take longer to complete, there will be situations where the offer to purchase and offer to lease are subject to satisfactory radon testing.

Radon testing protocols are different for commercial properties. Consider consulting with a C-NRPP certified professional to determine correct procedures under current federal and provincial laws and guidelines. For example, in accordance with the *Radon Awareness and Testing Act* (Bill 209), by 2019 it will be mandatory in Alberta to radon test and mitigate, if at or above 200 becquerels per cubic metre, property in which a childcare business, such as a daycare, operates.

Related information

Legislation

- *Real Estate Act* Rules, sections 1(1)(t), 41(b), 41(j), 57(i), 59(4)(e), 59.1(4)(b)(v)

Other Information:

- Radon – Reduction Guide for Canadians (Government of Canada)
- Radon – a Guide for Canadian homeowners (Government of Canada)
- A Homeowner’s Guide to Radon (Canadian Real Estate Association)
- www.evictradon.ca
- Canadian National Radon Proficiency Program (www.c-nrpp.ca)