# ENVIRONICS RESEARCH

## **2018 National Radon Awareness Survey**

### **EXECUTIVE SUMARY**

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For more information on this report: hc.cpab.por-rop.dgcap.sc@canada.ca

## **Executive summary**

#### **Background and objectives**

Radon is the second leading cause of lung cancer after smoking and the leading cause among non-smokers. Health Canada (HC) leads an ongoing National Radon Program (NRP) with the goal of reducing the health risks associated with radon exposure.

Public opinion research was conducted in 2007 and 2013 to understand knowledge and awareness of radon, and its associated risks among Canadians. Health Canada identified the need to conduct follow-on research, to help evaluate and measure the effectiveness of the efforts of the NRP over the last five years. The purpose of this research was to obtain insights into the knowledge, awareness, attitudes and behaviours of Canadians regarding radon. More specifically, the objectives of the research were:

- To collect data that can be compared to the 2007 and 2013 waves of research for radon awareness, attitude and behaviour levels;
- To measure knowledge levels of Canadians in terms of what radon is and where it is found;
- To assess knowledge levels about how radon is detected or measured, and what can be done to effectively prevent or reduce exposure to radon (prevention and remediation);
- To determine past actions or behaviours in situations where the presence of radon in the home was suspected or detected, including the proportion of respondents who have tested and or remediated their home for radon, and sources of information/assistance sought; home testing and/or remediation and the associated costs;
- To determine potential future actions or behaviours if the presence of radon in the home was suspected or detected, including potential sources of information;
- To measure their opinion on the current availability of radon testing and remediation services and products in Canada, and their perception of the cost and required duration of radon tests;
- To determine if financial barriers impact testing and remediation; and
- To determine perceptions of the federal government's responsibilities regarding education, remediation and current sources of radon information to Canadians.

#### Methodology

The survey was conducted by Environics Research Group and is based on 1,903 telephone interviews conducted from February 5 to March 7, 2018. The sampling method was designed to complete at least 1,600 interviews with the target audience of Canadians 18 years of age and over living in private households, in the 10 provinces and three territories. Respondents were screened to ensure they were household decision-makers and residents of single family dwellings with ground floor or basement living space, as these are the primary audience for radon messaging. The base sample of 1,602 was stratified

Note that the northern territories were not included in the 2007 survey.

New in 2018, tenants were included provided they had living space on or below the ground floor, and qualification was extended to basement dwelling space.

across five designated regions to ensure meaningful data and analysis at the regional level. An additional 301 oversample interviews were conducted with respondents living in identified radon-prone areas.<sup>3</sup>

The random-probability sample was designed as follows:

TOTAL SAMPLE	CANADA	Atlantic	Quebec	Ontario	Prairies	B.C.	Territories	Radon- prone over- sample
<b>1,900</b> (+/- 2.2%)	<b>1,600</b>	180	295	425	325	250	125	300
	(+/- 2.4%)	(+/- 7.3%)	(+/- 5.7%)	(+/- 4.7%)	(+/- 5.4%)	(+/- 6.2%)	(+/- 8.7%)	(+/- 5.6%)

Margins of sampling error shown are at the 95% confidence level

The data are statistically weighted to ensure the sample is as representative of this population as possible (region, gender and age of primary household maintainer for private owned and rented households in Canada) according to the most recently available Census information. The margin of error for a sample of 1,903 is +/- 2.2 percentage points, in 19 out of 20 samples (margin of error is greater for subgroups). A more detailed description of the methodology is presented at the back of the report, along with a copy of the questionnaire (see Appendix).

#### **Key findings**

This wave of research reveals a growing awareness of aspects of radon among Canadian householders. The proportion aware of radon is the same as in 2013, but considerably more can identify it as harmful to health without prompting, or know it is naturally occurring and comes from the ground. Self-rated knowledge of radon has increased noticeably. Although still minorities, more Canadians than in 2013 have heard something about their local radon levels, and more have had their home's radon level tested – including over one in ten in radon-prone areas – and more have considered testing. Half of those who have tested used a DIY kit, and one-third of these now say the kit was deployed for three months or longer. Strong majorities say they would test if they became concerned about radon in their home, and would remediate if the radon level was found to be high. Majorities are able to identify true from false statements about radon, except there is a continuing impression it is hard to remove from a home, which will likely always be the case unless householders are able to undertake remediation themselves or for under \$1,000.

There continue to be areas identified by the survey where additional work is required to encourage Canadians to take action on radon. Householders consistently point to lack of information as a barrier to home radon testing; the next biggest barrier is not feeling it is enough of a personal risk. Radon is not spontaneously identified as a public or government concern, and there is not a lot of awareness about how radon levels can be reduced, or how long a test should be deployed for accurate detection of radon levels. However, the research also provides guidance for what messaging might be best to convince Canadians radon is an issue worthy of their attention. Householders are most likely to think making radon testing a requirement for buying or selling a home or hearing the community has high levels of radon would be effective ways to convince people to have the radon level in their home reduced.

Throughout this report the term "radon-prone" is used. "Radon-prone" refers to areas known to have an above-average percentage of homes with radon levels above the Canadian guideline.

The following summarizes the key findings from the research:

#### Radon knowledge and awareness

- Two-thirds (64%) of Canadian householders are aware of radon, unchanged from 2013. Awareness remains higher in radon-prone areas (80%) than elsewhere (60%). Those aware of radon remain most likely (55%) to attribute this knowledge to media (TV, newspapers, magazines or radio). One in ten now mention hearing about it from friends/family/word of mouth, which another indication radon knowledge is growing.
- Self-assessed radon knowledge levels have noticeably increased since 2013. Two in ten (21%, up from 9% in 2013) know at least something, and close to half (45%, up from 34%) know "a little."
  Responses to the knowledge-testing question "what is radon" confirm an increase in awareness: for example, Canadians are considerably more likely than in 2013 to say radon is poisonous, toxic or generally harmful (22% vs. 8%), or to indicate it is naturally occurring/comes from the ground (21% vs. 5% in 2013).
- Majorities of householders say it is definitely or might be true radon can be found in most homes (60%), that exposure to radon is the leading cause of lung cancer among non-smokers (55%), and that reducing radon costs about as much as replacing two major appliances (58%). However, the majority also still believes it might be true that radon is hard to remove from a home (54%). Majorities also recognize as false certain statements that suggest confusion with substances like Freon or VOCs; however, from one-quarter to one-third of householders think these false statements might be true, indicating more education is likely needed.
- There has been a small decrease in the proportion who spontaneously indicate people can test for radon levels in their home, but when DIY kits are mentioned, over half (53%) still know they are available at home improvements stores. However, few know kits should remain in the home for at least three months to accurately detect the radon levels, and householders are no more likely than in 2013 to spontaneously be able to say how home radon levels can be reduced.

#### **Experience with radon**

- Although still a small minority, the proportion who report having had the radon levels in their home tested has doubled (6% in 2018, from 3% in 2013) and there has been a similar increase in the proportion who would consider having testing done (16%, up from 9%). Lack of concern about radon and lack of information continue to be the main barriers to both testing and remediation.
- Two-thirds (66%) who have had their home's radon tested say it took place within the past five years, and half (49%) used a DIY kit they purchased. One-third (35%) say it was in the home for three months or longer, while two in ten (20%) say it took a couple of days. Three-quarters say the radon level was low, which is why only a few went on to take action to remediate. Increasing ventilation is the most mentioned activity taken or planned. Over half (55%) who tested for radon say they either used or will use a certified professional for any needed remediation. Very few (n=24) retested after remediation, and in all cases they say radon levels were acceptably reduced.
- Most Canadians who have not yet tested say they would be willing to have their home's radon level
  tested (52% definitely, 33% likely) if they had reason to become concerned; half are willing to spend
  at least \$50 to do so. As in 2013 the vast majority (86%) say they would be likely to act on the results

- of that test should remediation be required. Note intention to test or remediate may be overstated, as this was posed as a hypothetical situation and it costs respondents nothing to say yes.
- One-third (33%, up four points) believe \$2,000 to \$3,000 is a reasonable price to spend to reduce the level of radon in the home; close to half (45%) think this price range is unreasonable. One-quarter (24%, up 8 points) who think that \$2,000 to \$3,000 is unreasonable would be willing to pay at least \$500.

#### **Radon information**

- Although still a small minority, twice as many (7%, up from 3%) Canadian householders report
  hearing or seeing something about radon programs or activities to help people deal with radon in
  their homes (around three in ten of those who have heard something believe that the federal
  government is the sponsor). The proportion indicating they have ever taken steps to learn about
  radon, although still small, has also doubled (12%, up from 6%).
- Householders who have sought information about radon chose to do so using Google, other web
  sites and the media. Google is also the most widely mentioned source for obtaining radon
  information in the future (46%). Health Canada is the most cited individual organization that would
  be approached for radon information by those who have not already sought it out (8%, down from
  15% in 2013).
- Half (48%, down from 58%) of Canadians who have not yet had their dwellings tested for radon are
  not motivated by what they learned in the survey to get their radon tested, but notable proportions
  say they are now motivated to test (26%, up from 15%) or at least want to find out more (12%,
  comparable to 15%).
- Householders were asked to rate how effective they feel each of seven factors would be in convincing people to have the radon level in their home reduced. The aspects with the highest ratings for "very effective" are: if radon testing were to be required as part of buying or selling a home; being told your community has high levels of radon; and being told radon is a major cause of lung cancer, whether or not people smoke. Least likely to be rated as very effective are a federal government rebate of 15 percent, and knowing the cost of remediation is comparable to other home maintenance repairs, like replacing two major appliances. This is consistent with minorities thinking the typical remediation price is reasonable.

#### Using the results

The research findings will be used to help guide the future objectives, research and outreach activities of the National Radon Program, to maximize the effectiveness of the program and encourage and enable Canadians to take actions to reduce their radon exposure.

#### **Cost of research**

The cost of this research was \$97,709.97 (HST included).

#### Political neutrality statement and contact information

I hereby certify as a Senior Research Associate of Environics Research Group that the deliverables fully comply with the Government of Canada political neutrality requirements outlined in the Communications Policy of the Government of Canada and Procedures for Planning and Contracting Public Opinion Research. Specifically, the deliverables do not contain any reference to electoral voting intentions, political party preferences, standings with the electorate, or ratings of the performance of a political party or its leader.

Brenda Sharpe
Senior Research Associate, Corporate and Public Affairs
Environics Research Group
<a href="mailto:brenda.sharpe@environics.ca">brenda.sharpe@environics.ca</a> / 613.699.6886

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For more information, contact hc.cpab.por-rop.dgcap.sc@canada.ca