





Household Radon in Canada

<100 Bq/m3

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 5 (17.8%) are ≥200 Bq/m³
1 in 4 (24.2%) are 100-199 Bq/m³
Average Radon = 84.7 Bq/m³
Current Record High = 32,321 Bq/m³



CANADA, SINGLE-DETACHED HOUSES

53% of houses in Canada are single-detached properties

<100 Bq/m3

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 5 (20.4%) are ≥200 Bq/m³ 1 in 4 (26.4%) are 100-199 Bq/m³ Average Radon = 93.4 Bq/m³



CANADA, SEMI-DETACHED HOUSES

10% of houses in Canada are semi-detached properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 9 (11.1%) are ≥200 Bq/m³ 1 in 5 (18.8%) are 100-199 Bq/m³ Average Radon = 61.5 Bq/m³



CANADA, ROW-STYLE HOUSES

7% of houses in Canada are row-style attached properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 13 (7.9%) are ≥200 Bq/m³ 1 in 6 (15.6%) are 100-199 Bq/m³ Average Radon = 51.8 Bq/m³



MULTIFAMILY RESIDENTIAL PROPERTIES

30.4% of Canadians live in multifamily dwellings

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 10 (9.3%) multifamily residential properties are ≥200 Bq/m³

1 in 7 (14.3%) record radon levels between 100 and 199 Bq/m³



CANADA, URBAN COMMUNITIES

62% of houses in Canada are in urban communities

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 6 (17.4%) are \geq 200 Bq/m³ 1 in 4 (26.4%) are 100-199 Bq/m³ Average radon = 86.3 Bq/m³



CANADA, URBAN HOUSING TYPES

62% of houses in Canada are in urban communities

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 6 (17.4%) Single-detached properties are ≥200 Bq/m³
 1 in 8 (12.6%) Semi-detached properties are ≥200 Bq/m³
 1 in 11 (9.1%) Row-style properties are ≥200 Bq/m³



CANADA, RURAL COMMUNITIES

38% of residential buildings in Canada are in rural communities

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 4 (23.8%) are ≥200 Bq/m³ 1 in 4 (25.7%) are 100-199 Bq/m³ Average radon = 99.9 Bq/m³



CANADA, RURAL HOUSING TYPES

38% of residential buildings in Canada are in rural communities

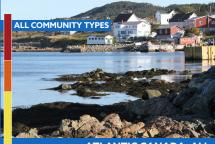
<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 4 (23.0%) Single-detached properties are ≥200 Bq/m³
 1 in 8 (12.2%) Semi-detached properties are ≥200 Bq/m³
 1 in 8 (12.5%) Row-style properties are ≥200 Bq/m³







ATLANTIC CANADA, ALL HOUSING TYPES

Radon levels for Atlantic Canada

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 3 (33.3%) are ≥200 Bq/m³
1 in 4 (22.3%) are 100-199 Bq/m³
Average Radon = 116.8 Bq/m³
Current Record High = 5,847 Bq/m³



ATLANTIC CANADA, SINGLE-DETACHED HOUSES

83.7% of houses in Atlantic Canada are single-detached properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer

≥200 Bq/m³

1 in 3 (34.6%) are ≥200 Bq/m³ 1 in 4 (23.1%) are 100-199 Bq/m³ Average Radon = 122.2 Bq/m³



ATLANTIC CANADA, SEMI-DETACHED HOUSES

12.2% of houses in Atlantic Canada are semi-detached properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 4 (28.0%) are ≥200 Bq/m³ 1 in 6 (16.7%) are 100-199 Bq/m³ Average Radon = 88.1 Bq/m³



ROW-STYLE HOUSES

4.1% of houses in Atlantic Canada are row-style attached properties

<100 Bg/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 5 (22.9%) are ≥200 Bq/m³ 1 in 5 (22.0%) are 100-199 Bq/m³ Average Radon = 90.8 Bq/m³



RURAL COMMUNITIES

70.3% of houses in Atlantic Canada are in a rural community

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 3 (34.8%) are ≥200 Bq/m³ 1 in 4 (22.1%) are 100-199 Bq/m³ Average Radon = 121.2 Bq/m³



URBAN COMMUNITIES

29.6% of houses in Atlantic Canada are in a urban community

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 3 (29.8%) are ≥200 Bq/m³ 1 in 4 (22.9%) are 100-199 Bq/m³ Average Radon = 106.3 Bq/m³







CENTRAL CANADA, ALL HOUSING TYPES

Radon levels for Central Canada

<100 Bg/m³

100-199 Bq/m³ Risk of lung cancer

≥200 Bq/m³

1 in 6 (16.4%) are ≥200 Bq/m³
1 in 4 (22.9%) are 100-199 Bq/m³
Average Radon = 76.9 Bq/m³
Current Record High = 32,321 Bq/m³



SINGLE-DETACHED HOUSES

74.8% of houses in Central Canada are single-detached properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 5 (19.0%) are ≥200 Bq/m³ 1 in 4 (24.6%) are 100-199 Bq/m³ Average Radon = 84.0 Bq/m³



CENTRAL CANADA, SEMI-DETACHED HOUSES

15.5% of houses in Central Canada are semi-detached properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 10 (9.7%) are ≥200 Bq/m³ 1 in 5 (19.7%) are 100-199 Bq/m³ Average Radon = 60.2 Bq/m³



CENTRAL CANADA, ROW-STYLE HOUSES

9.8% of houses in Central Canada are semi-detached properties

<100 Bg/m³

100-199 Bq/m³ Risk of lung cancer

≥200 Bq/m³

1 in 15 (6.6%) are ≥200 Bq/m³ 1 in 7 (15.0%) are 100-199 Bq/m³ Average Radon = 48.9 Bq/m³



URBAN COMMUNITIES

64.6% of houses in Central Canada are in a urban community

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 7 (14.3%) are ≥200 Bq/m³ 1 in 5 (22.6%) are 100-199 Bq/m³ Average Radon = 72.4 Bq/m³



RURAL COMMUNITIES

35.4% of houses in Central Canada are in a rural community

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 5 (20.2%) are ≥200 Bq/m³ 1 in 4 (23.6%) are 100-199 Bq/m³ Average Radon = 85.1 Bq/m³







CANADIAN PRAIRIES AND NWT, ALL HOUSING TYPES

Radon levels for the Canadian Prairies and Northwest Territories

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer

≥200 Bq/m³

1 in 5 (20.0%) are ≥200 Bq/m³ 1 in 3 (37.2%) are 100-199 Bq/m³ Average Radon = 113.6 Bq/m³ Current Record High = 11,333 Bq/m³



CANADIAN PRAIRIES AND NWT, SINGLE-DETACHED HOUSES

82.1% of houses in Prairie and NWT Canada are single detached properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 5 (21.4%) are ≥200 Bq/m³ 1 in 3 (38.8%) are 100-199 Bq/m³ Average Radon = 120.0 Bq/m³



CANADIAN PRAIRIES AND NWT, SEMI-DETACHED HOUSES

9.6% of houses in Prairie and NWT Canada are semi-detached properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 6 (16.1%) are ≥200 Bq/m³ 1 in 3 (34.2%) are 100-199 Bq/m³ Average Radon = 96.8 Bq/m³



CANADIAN PRAIRIES AND NWT, ROW-STYLE HOUSES

8.3% of houses in Prairie and NWT Canada are row-style properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer

≥200 Bq/m³

1 in 10 (10.3%) are ≥200 Bq/m³ 1 in 4 (24.8%) are 100-199 Bq/m³ Average Radon = 71.2 Bq/m³



CANADIAN PRAIRIES AND NWT, RURAL COMMUNITIES

37.4% of houses in the Prairies and NWT Canada are in a rural community

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 4 (26.7%) are ≥200 Bq/m³ 1 in 3 (36.6%) are 100-199 Bq/m³ Average Radon = 129.2 Bq/m³



CANADIAN PRAIRIES AND NWT, URBAN COMMUNITIES

62.6% of houses in the Prairies and NWT Canada are in a rural community

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 6 (15.9%) are ≥200 Bq/m³ 1 in 3 (37.5%) are 100-199 Bq/m³ Average Radon = 104.3 Bq/m³







CANADIAN PACIFIC INTERIOR AND YUKON, ALL HOUSING TYPES

Radon levels for the Pacific Interior and Yukon

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer

≥200 Bq/m³

1 in 3 (31.6%) are ≥200 Bq/m³ 1 in 4 (28.3%) are 100-199 Bq/m³ Average Radon = 126.9 Bq/m³ Current Record High = 10,600 Bq/m³



CANADIAN PACIFIC INTERIOR AND YUKON, SINGLE-DETACHED HOUSES

77.3% of houses in the Pacific Interior and Yukon are single-detached properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 3 (34.2%) are ≥200 Bq/m³ 1 in 4 (28.3%) are 100-199 Bq/m³ Average Radon = 135.3 Bq/m³



YUKON, SEMI-DETACHED HOUSES

14.3% of houses in the Pacific Interior and Yukon are semi-detached properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 4 (24.1%) are \geq 200 Bq/m³ 1 in 3 (29.6%) are 100-199 Bq/m³ Average Radon = 102.4 Bq/m³



YUKON, ROW-STYLE HOUSES

8.4% of houses in the Pacific Interior and Yukon are row-style properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer

≥200 Bq/m³

1 in 5 (20.5%) are ≥200 Bq/m³ 1 in 4 (26.2%) are 100-199 Bq/m³ Average Radon = 92.0 Bq/m³



CANADIAN PACIFIC INTERIOR AND YUKON, URBAN COMMUNITIES

42.2% of houses in the Pacific Interior and Yukon are in a urban community

<100 Bg/m³

100-199 Bq/m³ Risk of lung cancer

≥200 Bq/m³

1 in 3 (29.2%) are ≥200 Bq/m³ 1 in 4 (26.4%) are 100-199 Bq/m³ Average Radon = 113.6 Bq/m³



CANADIAN PACIFIC INTERIOR AND YUKON, RURAL COMMUNITIES

57.8% of houses in the Pacific Interior and Yukon are in a rural community

<100 Bg/m³

100-199 Bq/m³ Risk of lung cancer

≥200 Bq/m³

1 in 3 (33.4%) are ≥200 Bq/m³ 1 in 3 (29.7%) are 100-199 Bq/m³ Average Radon = 136.9 Bq/m³







PACIFIC COASTAL CANADA, ALL HOUSING TYPES

Radon levels for Pacific Coastal Canada

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer

≥200 Bq/m³

1 in 75 (1.3%) are ≥200 Bq/m³
1 in 27 (3.7%) are 100-199 Bq/m³
Average Radon = 20.4 Bq/m³
Current Record High = 989 Bq/m³



PACIFIC COASTAL CANADA, SINGLE-DETACHED HOUSES

57.7% of houses in Pacific Coastal Canada are single-detached properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 113 (0.9%) are ≥200 Bq/m³ 1 in 20 (5.1%) are 100-199 Bq/m³ Average Radon = 23.1 Bq/m³



PACIFIC COASTAL CANADA, SEMI-DETACHED HOUSES

27.7% of houses in Pacific Coastal Canada are single-detached properties

<100 Bg/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 66 (1.5%) are ≥200 Bq/m³ 1 in 50 (2.0%) are 100-199 Bq/m³ Average Radon = 16.3 Bq/m³



PACIFIC COASTAL CANADA, ROW-STYLE HOUSES

14.6% of houses in Pacific Coastal Canada are row-style properties

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 37 (2.8%) are ≥200 Bq/m³ 1 in 62 (1.6%) are 100-199 Bq/m³ Average Radon = 17.9 Bq/m³



CANADIAN COASTAL PACIFIC, URBAN COMMUNITIES

80.0% of houses in the Canadian Coastal Pacific are in a urban community

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 130 (0.8%) are ≥200 Bq/m³ 1 in 48 (2.1%) are 100-199 Bq/m³ Average Radon = 18.3 Bq/m³



CANADIAN COASTAL PACIFIC, RURAL COMMUNITIES

20.0% of houses in the Canadian Coastal Pacific are in a rural community

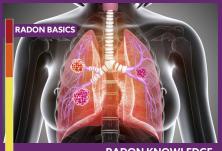
<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

1 in 28 (3.5%) are ≥200 Bq/m³ 1 in 10 (10.2%) are 100-199 Bq/m³ Average Radon = 28.8 Bq/m³





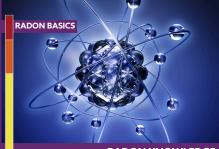


<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer

≥200 Bq/m³

Radon is radioactive and listed as a category 1 carcinogen (cancer-causing agent), meaning that it is absolutely known to cause cancer in humans



Radon is measured in a unit called a Becquerel (Bq) per meter cubed (Bq/m ³). 1 Bq means one radioactive emission per second.



<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

For a typical adult, long-term exposure to radon at or over 100 Bq/m³ will increase the lifetime risk of lung cancer by 16%.



<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

The best part of your home to place a radon test is the lowest level that you or someone else spends four or more hours a day.



<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

The younger a person is when exposed to radon, the greater their lifetime lung cancer risk is.



<100 Bq/m³ 100-199 Bq/m³ ≥200 Bq/m³

→ Risk of lung cancer →

Hiring a certified Canadian National Radon Proficiency Program (C-NRPP) professional will ensure an effective radon reduction.



Similar to tobacco and asbestos, it can take a decade or more of exposure to high radon before lung cancer might be diagnosed.



SERIES

<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer ≥200 Bq/m³

In Canada, newer houses typically contain much higher radon than older homes due to our changing building practices.



<100 Bq/m³

100-199 Bq/m³ Risk of lung cancer

≥200 Bq/m³

To make informed health decisions, perform a <u>long-term</u> (91+ day) radon test to ensure reliable results.



<100 Bq/m³ 100-199 Bq/m³ ≥200 Bq/m³

→ Risk of lung cancer →

2 in 5 of Canadian lung cancers are attributed to environmental exposures such as radon, combustion particulates, and heavy metals.



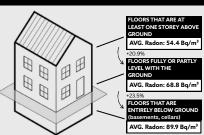


PRINTING OF THIS DECK OF CROSS CANADA SURVEY OF RADON AWARENESS CARDS WAS SPONSORED BY

EVICT RADON



RADON LEVEL DIFFERENCES BETWEEN FLOORS





HOUSING TYPES DEFINED?

We used the formal Statistics Canada definitions for these house types which are:

Single-Detached







Split-Storey l evel

Semi-Detached



Duplex

Attached Housing



Multi-Family Housing



Apartment Building



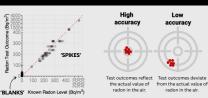
ENSURING PRECISE RADON TEST READINGS - DUPLICATES



2,014x duplicate radon tests were performed at the same time, with each radon test placed ≤10 cm from one another. As the duplicate test outcomes (dots) align very well with the red line, this tells us that the data used in the Cross Canada Radon Survey shows HIGH PRECISION.



ENSURING ACCURATE RADON TEST READINGS - BLANKS AND SPIKES



265x blank tests sent for analysis without household exposure, and 75x spike tests exposed to known radon amounts were performed. As the test outcomes (dots) align well with the red line, this tells us that the data used in the Cross Canada Radon Survey shows HIGH ACCURACY.



HOW IS A MORE 'URBAN' **COMMUNITY DEFINED?**

We used the formal Statistics Canada definitions for these house types which are:

Large Urban Population Centre =





E.G., Vancouver (BC), Calgary (AB), Regina (SK), Winnipeg (MB), Toronto (ON), Ottawa (ON), Montreal (QC), Halifax (NS)...

Medium Urban Population Centre = 30,000 - 99,999 people



'Large Town'

E.G., Airdrie (AB), Moose Jaw (SK), Chatham (ON), Charlottetown (PEI), Kanata (ON), Moncton (NB)...



HOW IS A MORE 'RURAL' COMMUNITY DEFINED?

We used the formal Statistics Canada definitions for these house types which are:

Small Population Centre = 1.000-29.999 people

Rural Population Area = 1,000-29,999 people



'Small Town'



'Village Hamlet' (and isolated properties)

E.G., Yellowknife (NWT), Tofino (BC), Martensville (SK), Whitehorse (YK), Lunenberg (NS), Iqaluit (NU)...

E.G., Bragg Creek (AB), Rocky Lake (MB), Big Beaver (SK), Chalk River (ON), Tewksbury (QC)...