

- **Name**

Pam Warkentin

- **Enter the date of the meeting you wish to present to council**

October 3, 2024

- **Which is your preference for attending the meeting.**

Virtually

- **Will there be anyone other than yourself addressing Council?**

No

- **Use the space below to clearly outline your purpose for presenting to council. Provide a brief outline of your subject matter including your suggested outcome.**

We conducted a survey of radon levels with the Southwest Public health. We have a public facing report that we are planning on publishing but we would like to present the information to your Mayor and council first so we can share the data and answer their questions first.

More information about our program can be found here:

<https://takeactiononradon.ca/resources/100-radon-test-kit-challenge/>

- **Will you be providing any additional written information in addition to your summary above? If YES please note it must be provided to the Clerks department no later than 2:00pm on the Tuesday prior to the meeting**

Yes

- **Will you be providing any additional electronic information in addition to documents you will be attaching? If YES please note it must be provided to the Clerks department no later than 2:00pm on the Tuesday prior to the meeting**

Yes

- **Have you appeared before council to discuss the same topic in the past?**

No

TAKE ACTION ON RADON

ST. THOMAS and WOODSTOCK, ON

100 Radon Test Kit Challenge



115 HOMES

participated by testing for radon gas during the winter of 2023 using 91 day alpha track detectors. This represents less than 1% of the community dwellings.

15% of homes tested above Health Canada's guideline of 200 Bq/m³



Radon is a naturally occurring radioactive gas that comes from the ground.



Exposure to elevated levels of radon is linked to increased chances of developing lung cancer.



UNDER 100 Bq/m³
(55%)



100-200 Bq/m³
(30%)



OVER 200 Bq/m³
(15%)

Levels can vary between neighbouring houses. The only way to know your radon level is to test.



Radon enters a home through contact with the ground and can build up to elevated levels.



100 Radon Test Kit Challenge: Southwestern Public Health, ON

“Empowering Communities, Saving Lives”





Project Overview:

- The *100 Radon Test Kit Challenge* program provides 100 radon test kits (or more), free of charge, to communities, to distribute to their citizens.
- “Turn-key program” provides tools and resources for each step of the process.
- No cost to participating communities: requires only staff time for organizing, distributing, and collecting test kits.



Canadian
Cancer
Society



Impact to date

Over 120 Communities

-10 Provinces

-5 First Nations

-2 Métis groups



*Over 20 000 detectors distributed
with an average of 74% return rate:
more than 14 000 homes tested*

*More than 30% of those who've tested over
200 Bq/m³ have
Mitigated their homes already!*



2018-19

(9)

Moncton, NB
 Salmon Arm, BC
 Winnipeg, MB
 Spruce Grove, AB
 Golden, BC
 Souris, MB
 Port Colborne, ON
 Baden, ON
 Wabana, NL



2019 – 2020
(15)

Halifax, NS
 Sherbrooke, QC
 Brandon, MB
 Dauphin, MB
 Greater Madawaska
 Region, ON
 Summerland, BC
 Valemount, BC
 Coquitlam, BC
 Abbotsford, BC
 McBride, BC
 Vaudreuil-Dorion, QC
 Pembroke, ON
 Harrison Park, MB
 North Grenville, ON

2020 – 2021
(20)

Sicamous, BC
 Peachland, BC
 West Bank First Nation, BC
 West Kelowna, BC
 Kelowna, BC
 Vernon, BC
 Sundre, AB
 Black Diamond, AB
 Eston, SK
 Silver Harbour, MB
 Lakeshore, MB
 Chatham-Kent, ON
 Leeds & Thousand Islands, ON
 Carleton-sur-mer, QC
 Saint-Joseph du-Lac, QC
 Lorraine, QC
 Candiac, QC
 Madawaska, NB
 Mount Pearl, NL
 Stephenville, NL

2021 – 2022 (30)

Barriere, BC
 Peachland, BC
 West Bank First Nation, BC
 West Kelowna, BC
 Kelowna, BC
 Vavenby, BC
 Clearwater, BC
 Blue River, BC
 Grand Forks, BC
 Revelstoke, BC
 Eatonia, SK
 Weyburn, SK
 Clarence-Rockland, ON
 Ottawa, ON
 Waterloo, ON
 Mallorytown, ON
 Candiac, QC
 Percé, QC
 Deux-Montagnes, QC
 Saint-Augustin-des-
 Desmaures, QC
 Grand Falls, NB
 Gander, NL
 Harbour Breton, NL
 Fogo Island, NL
 7 Nations Communities, NB
 Treaty 3 Communities, ON

2022 – 2023 (25)

Kimberley, BC
 Kelowna, BC
 West Kelowna, BC
 Lake Country, BC
 Peachland, BC
 West Bank First Nation, BC
 Salt Spring Island, BC
 Chilliwack, BC
 Mission, BC
 Cultus Lake, BC
 Hope, BC
 Harrison and Kent, BC
 Estevan, SK
 Whitecap Dakota First
 Nation, SK
 Edenwold, SK
 East St. Paul, MB
 RM of Hanover, MB
 Cavan Monaghan, ON
 Ste-Anne-de-Bellevue, QC
 Prévost, QC
 Cantley, QC
 Gaspé, QC
 Beloeil, QC
 Woodstock First Nation, NB
 Riverview, NB

100 Test Kit Challenge communities, by year

100 Test Kit Challenge communities, by year



2023 – 2024

BC Cancer – Victoria, BC
Fort St. James, BC
Lumby, BC
Lillooet, BC
Keremeos, BC
Radium Hot Springs BC
Invermere, BC
Enderby, BC

Edmonton, AB
Innisfail, AB
Lacombe County, AB
RM of Miry Creek, SK (Abbey, SK)

Neepawa, MB
Dauphin, MB
Portage la Prairie, MB
Pinawa, MB

Augusta, ON
Woodstock and St. Thomas, ON

Pessamit, QC
Sainte-Julie, QC
Sainte-Marthe-sur-le-Lac, QC
Pincourt, QC
Maria, QC

Conception Bay South, NL
Logy Bay-Middle Cove-Outer Cover, NL
Gillams, NL
Pasadena, NL

Repeating in:

Regional District of Central Okanagan, BC
Woodstock First Nation, NB
Kimberley, BC
Fraser Valley Regional District, BC



Program Goals

1) Distribute radon test kits to communities where there is a risk of elevated radon levels, and where testing has thus far been limited.

- *100 test kits distributed for 100 days*

2) Raise local radon awareness

- *community members with a personal report*

- *community champions receive a summary report*



3) Generate data in under-tested urban and rural regions of the country

4) Inspire legacy radon programming in participating communities

Radon Basics – Health Effects

Radon is the leading cause of Lung Cancer in non-smokers.

Radon greatly increases smoker's risk of getting lung cancer.

Health Canada estimates over **3,000** Canadians per year die of radon-related lung cancer.



From Health Canada's Radon Gas: It's in your home.
https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/hecs-sesc/pdf/pubs/radiation/radon_brochure/radon_brochure-eng.pdf

Radon Basics - Source

Radon is a radioactive gas which comes from the soil.

Enters all buildings which have contact with the ground and can move throughout the building, including upper levels.

Typically highest levels are found in the basement or first floor.

Health Canada recommends all buildings be tested using a 3-month test during the heating season and any homes found with levels above 200 Bq/m³ be reduced.



radonova
The global leader in radon measurement

REPORT NUMBER: 6948076.1
REPORT DATE: 2024-05-14
REPORT PAGE: 1 of 2
PRINT DATE: 2024-05-14
OWN ID: Boston Bar
BY: Take Action on Radon
REPORT RECEIVER(S): p_warrentin@caise.ca
Take Action on Radon
Rosemary Taylor

Rosemary Taylor
CANADA

RADON MONITORING REPORT

Description of the measurement
The measurement was performed with a closed alpha-track detector (Radtrak™/Radtrak™) following the quality guidance given in CNRPP-AL-DF-v6.

Property data and address
MEASURE SITE ADDRESS

The detector(s) arrived to Radonova Laboratories 2024-04-22. They were measured 2024-04-29.
BUILDING ID

Test data have been given by Rosemary Taylor

Test results

DETECTOR	MEASUREMENT PERIOD	DESCRIPTION / LOCATION	ROOM	FLOOR	RADON RESULT
101 050 987 (Radtrak™)	2023-12-06 – 2024-03-21				59 ± 10 Bq/m³

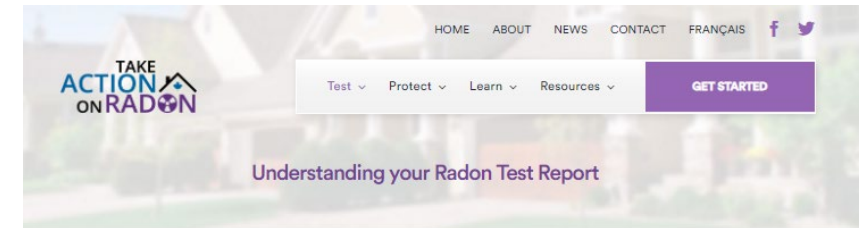
Comment to the results
The radon detector (101050987) was received by Radonova (32) days after the given end date. The result could be overestimated due to the radon exposure during this storage/transport.

Trygve Rönnqvist (Electronically signed)
Signature Radonova Laboratories Laboratory Measurement Specialist
This report may only be reproduced in full, unless issuing laboratory has given prior written approval.

DISCLAIMER
Radonova Inc. makes no warranty of any kind, express or implied, as regard to the use, operation or analysis of any Radonova Inc. monitor. Radonova Inc. cannot be held liable in case of measurement error or for a particular radon measurement. Radonova Inc. is not responsible for any damage.

RADONOVA INC.
1 EAST 22nd STREET, SUITE 200
TORONTO, ON M5S 1A8

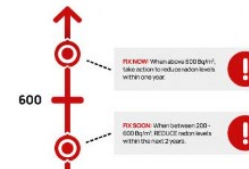
Detectors Distributed	Start Surveys Completed	End Surveys Completed	Reports Sent out	Return Rate
157	125	105	115	73%



The Canadian guideline for radon in indoor air is 200 Bq/m³.

If you've tested your home, and the radon concentration is above the Canadian guideline of 200 Bq/m³, Health Canada recommends that you take action to lower the concentrations.

The higher the radon concentrations, the sooner action should be taken to reduce levels to as low as practically possible.

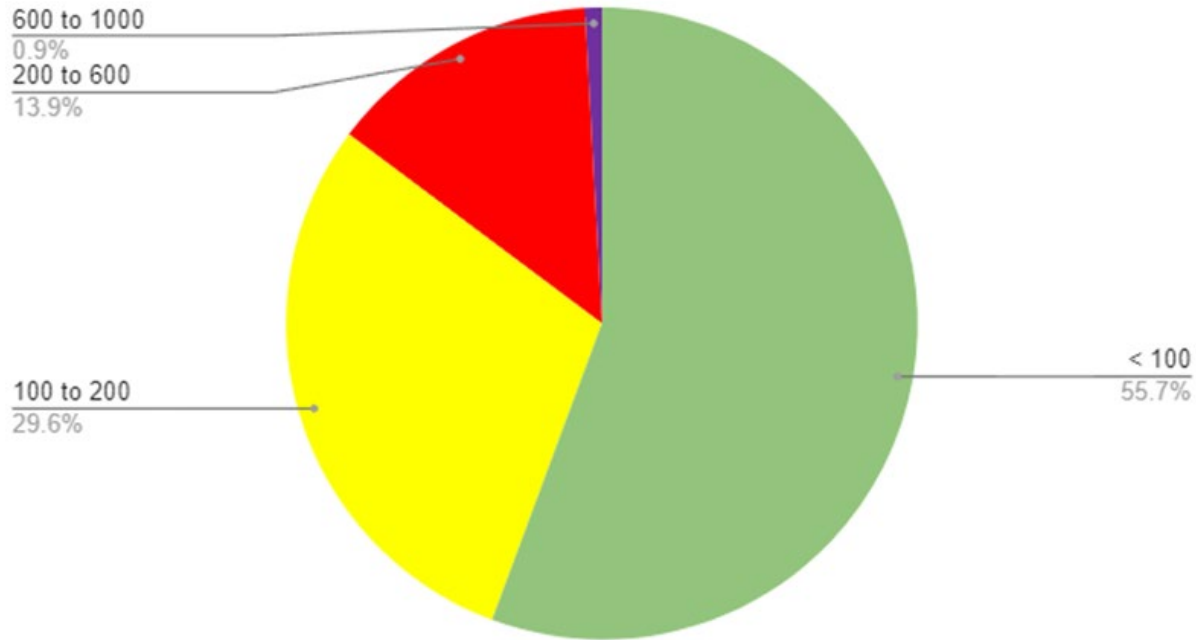


Health Canada recommends that homeowners consult with a Radon Mitigation Professional certified by the Canadian National Radon Proficiency Program (C-NRPP) to determine the best radon reduction method. While the health risk from radon exposure below the Canadian guideline is small, there is no level that is considered risk free. It is the choice of each homeowner to decide what level of radon exposure they are willing to accept.

<https://takeactiononradon.ca/test/understanding-your-radon-test-report/>

By now, each participant who completed the process, should have received an individual confidential report.

Results for Southwestern Public Health



15% tested over 200 Bq/m³

115 Households Completed the testing

115		Total
0	0.0%	Above 1000
1	0.9%	Between 600 and 1000
16	13.9%	Between 200 and 600
34	29.6%	Between 100 and 200
64	55.7%	Less than 100



Information by Postal Code
(where datapoints are above 5)

Postal Code	Number of Data points from 100 TK	Percentage of Tests above 200 Bq/m3	Average Radon Level as per 2023-2024 100RTKC Data	Highest Radon Level as per 2023-2024 100RTKC Data	Number of Data points in Cross-Canada Survey	Percentage of Tests above 200 Bq/m3	Average Radon Concentration from Cross-Canada Survey
N0J	14	14%	172	910	42	4.80%	78
N0L	7	0%	90	186	29	10.30%	125
N0M	6	17%	137	386	84	9.50%	82
N4S (Woodstock)	22	27%	149	527	28	17.90%	136
N4T (Woodstock)	8	38%	151	324	5	20.00%	121
N5P (St. Thomas)	13	0%	61	118	30	6.70%	75
N5R (St. Thomas)	26	12%	106	404	25	12.00%	80

Type of Home

	< 200	> 200	Total
Semi-attached home	4	0	4
Single Detached Home	73	13	86
Condo/apartment on second floor or above	1	0	1
Workplace	1	0	1
			88

Own/Rent

	Below 200	Above 200	Total
Own	76	12	88
Rent	1	1	2
			90



Intention to Mitigate if required

	< 200	> 200	Total
I am very likely to take action to reduce my radon level.	30	6	36
I am quite likely to take action to reduce my radon level.	38	9	47
I am undecided.	19	2	21
I am unlikely to take action to reduce my radon level.	0	0	0
			104

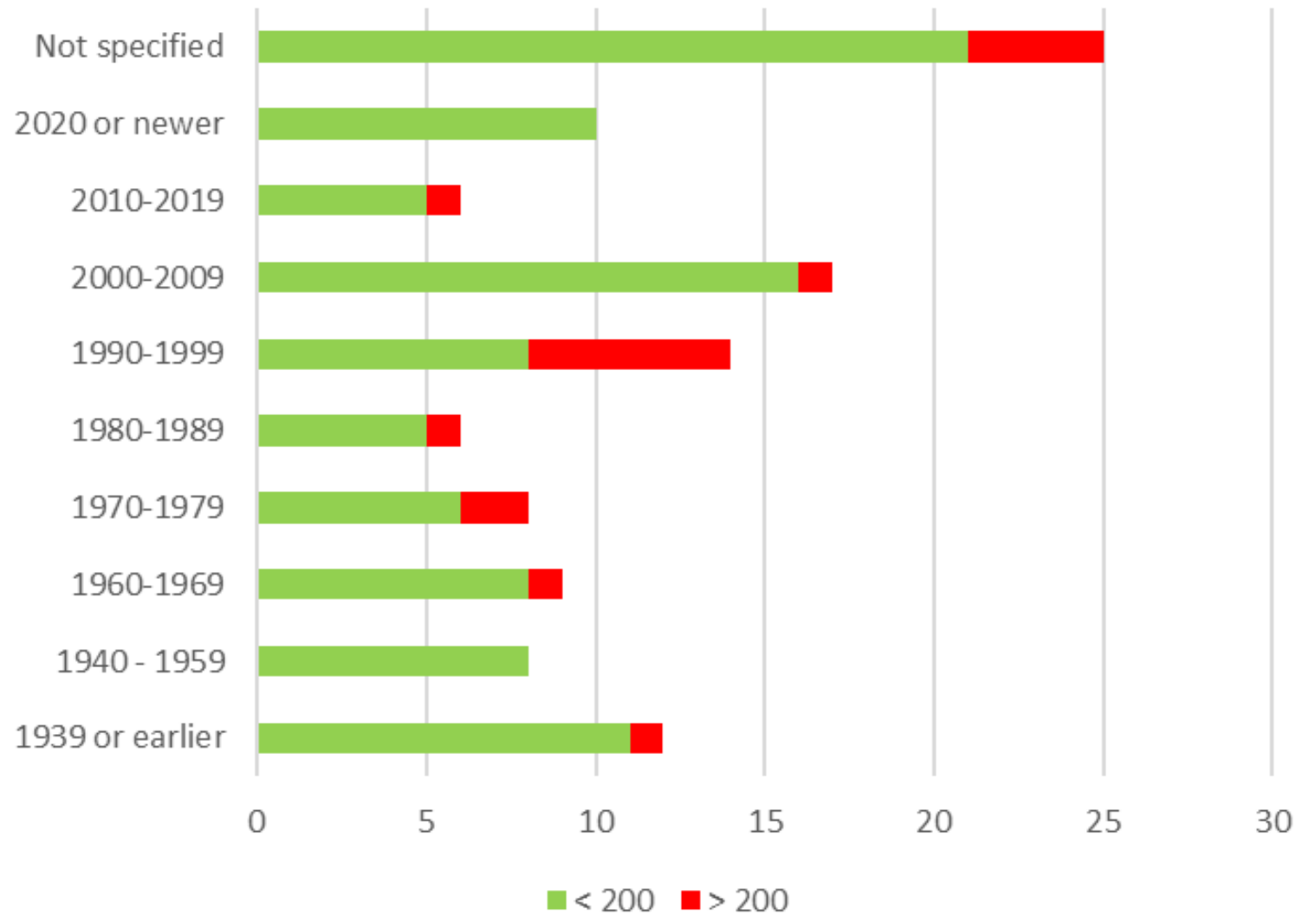
Have you previously tested for radon?

	< 200	> 200	Total
Yes	5	0	5
No	92	17	109
			114

Existing radon system?

	< 200	> 200	Total
No	71	15	86
I don't know	14	2	16
Yes, with a fan	2	0	2
Yes, a passive stack (no fan)	2	0	2
Radon rough-in only, no pipe	7	0	7
			106

Year of construction



Community Report

TAKE ACTION ON RADON
ST. THOMAS and WOODSTOCK, ON
100 Radon Test Kit Challenge



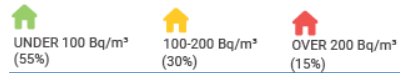
115 HOMES

participated by testing for radon gas during the winter of 2023 using 91 day alpha track detectors. This represents less than 1% of the community dwellings.

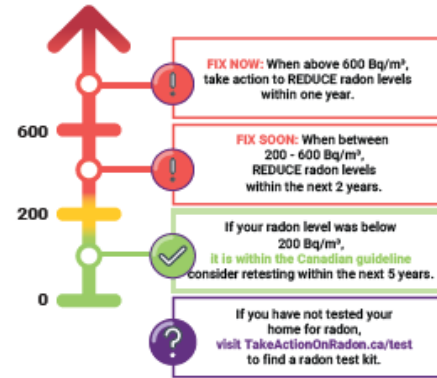
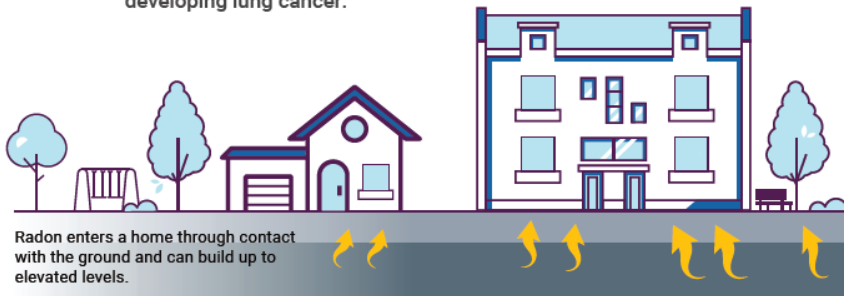
15% of homes tested above Health Canada's guideline of 200 Bq/m³

Radon is a naturally occurring radioactive gas that comes from the ground.

Exposure to elevated levels of radon is linked to increased chances of developing lung cancer.

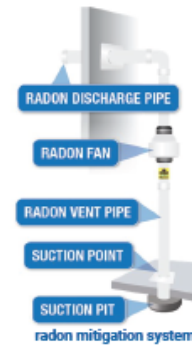


Levels can vary between neighbouring houses. The only way to know your radon level is to test.



Since radon levels fluctuate over time, testing with a long-term test (of at least 91 days) provides a better estimate of your annual radon exposure. Many digital detectors are available to purchase or to borrow for shorter test durations, but we still recommend testing for at least 91 days. If you borrow a digital monitor for a shorter test, consider following up with a long-term test.

Radon gas levels are reduced the most by installing a radon mitigation system. Research shows that certified radon professionals can reduce levels by over 90%. Other steps, such as increasing ventilation and sealing cracks, can help in the short-term but are less effective.



Missed your chance to test?

Check out Take Action on Radon's website for more information on how to access a long-term (91-day) test kit in your region and how to properly test your home.

TakeActionOnRadon.ca/test



Already tested and want to help?

If you are willing to share your data to help us better understand radon in your community, submit your information to our online radon depository.

TakeActionOnRadon.ca/share

HOW TO FIND A CERTIFIED PROFESSIONAL

TakeActionOnRadon.ca/test/find-a-radon-mitigation-professional/ Certified radon mitigation professionals are trained to properly assess your home, and design systems to efficiently and effectively reduce your radon level.

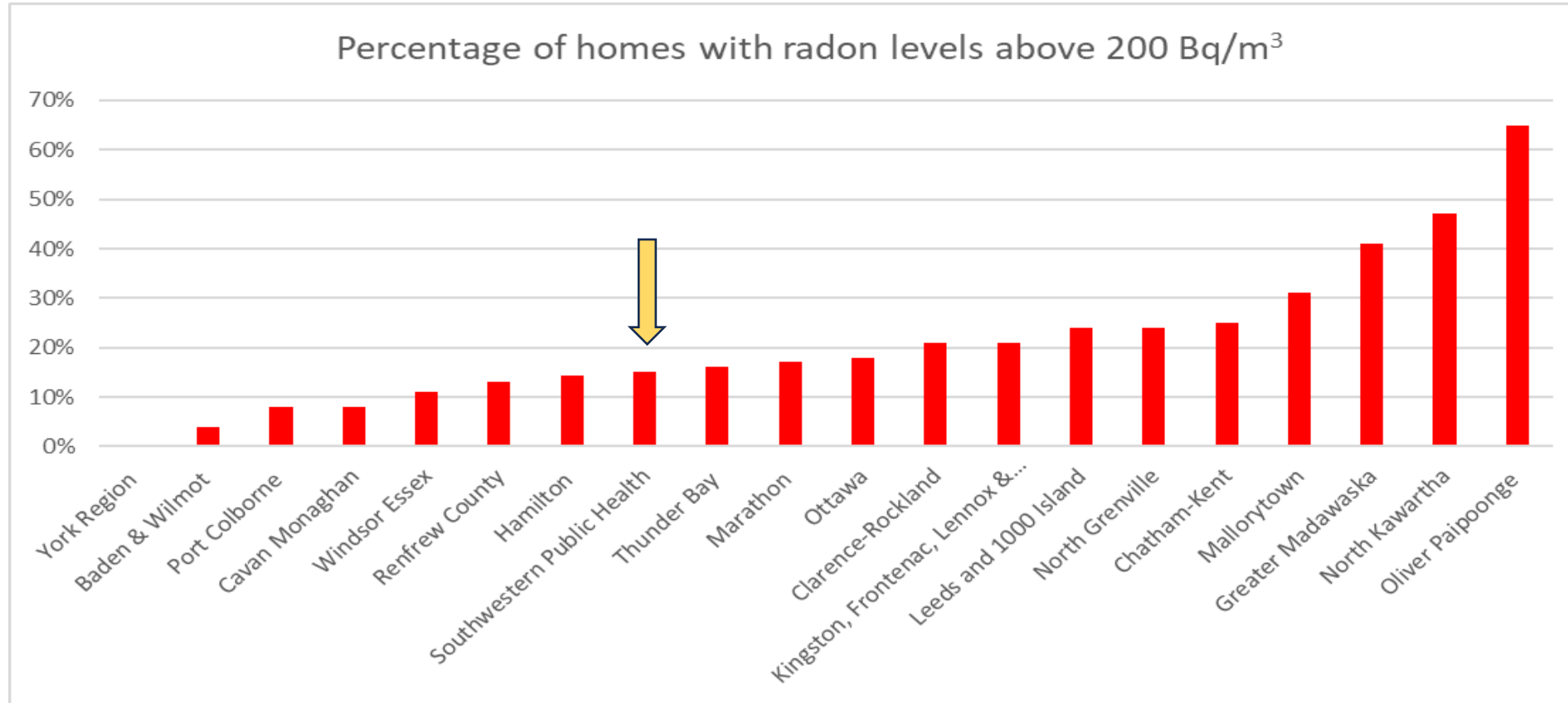
The Ontario Building Code section 9.13.4.1 indicates that "where Methane or Radon gases are known to be a problem, construction shall comply with requirements for soil gas control in MMAH Supplemental Standard SB-9 "requirements for soil gas control" Testing is the only method available to determine if Radon is present. All new construction in areas where, by testing, Radon is known to be a problem must take measures to meet or exceed the requirements of SB-9.

The Canadian General Standards Board standard CAN/CGSB-149.11-2019 provides technical recommendations for radon-control measures in new low-rise residential construction.

Tarion Warranty provides coverage for radon mitigation within the first seven years after a home is built.

More information: <https://www.tarion.com/homeowners/your-warranty-coverage/radon-and-your-warranty>

How does your community compare?



C-NRPP Professionals

- Certified Mitigation Professionals course in both Measurement and Mitigation
- C-NRPP Mitigation Professionals are required to have insurance

List of professionals available at
www.c-nrpp.ca/find-a-professional/



C-NRPP

CANADIAN – NATIONAL RADON PROFICIENCY PROGRAM

FIND A PROFESSIONAL

C-NRPP Certified professionals are certified to work in every province and territory in Canada. Please ask the Professional if you have questions about their service area.

A C-NRPP Mitigation Professional will help you lower your radon levels.

To locate a radon professional in your area, please select a search method below and provide the necessary search terms.

Search by postal code: Postal Code Distance

Search by province: Province

Search for

LUNGS MATTER

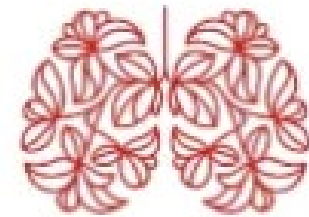
Financial support for home radon mitigation

Radon is the second-leading cause of lung cancer in Canada...it can also be



Lungs Matter

Home Radon Mitigation Grant Program

B R E A T H E
the lung association

In Partnership with

TAKE
ACTION
ON RADON

The Canadian Lung Association has recently launched a new grant program to help people across Canada afford radon mitigation services.

The Lungs Matter Grant Program aims to provide financial support to individuals who have been diagnosed with lung cancer and individuals considered a low-moderate income households with priority given to the low-income households.

<https://www.lung.ca/lungs-matter-radon-mitigation-support>



Ontario Home Warranty

<https://www.tarion.com/homeowners/your-warranty-coverage/radon-and-your-warranty>

Within the first 7 years, if radon gas within a home exceeds Health Canada's acceptable levels of $200\text{Bq}/\text{m}^3$, then **Tarion will cover the costs required to mitigate a home up to a limit of \$50,000 using a C-NRPP Mitigation professional.**

Process of Making a Claim

In order for radon claims to be accepted, the homeowner must supply test results showing test was conducting properly.



The screenshot shows a webpage with a navigation menu on the left and main content on the right. The navigation menu includes: An Outline of Your Warranty, One Year Warranty and Process, Two Year Warranty and Process, Seven Year Warranty and Process, When can I submit a warranty form?, **Radon and Your Warranty** (highlighted), Condominium Common Elements, Residential Condominium Conversions, Warranty Exceptions, Items/Deficiencies Not Covered, Construction Performance Guidelines, How to Appeal a Tarion Decision? +, and Office of the Ombudsperson.

The main content area is titled "Radon And Your Warranty" and contains the following text:

Radon is an invisible, odourless, naturally occurring gas found in soil. It seeps into homes through cracks in floors, walls and foundations – access points mainly found in basements. Since radon is naturally occurring, it's found in just about every home.

However, high concentrations of radon in a home may pose health risks. Health Canada says that people exposed to radon levels in excess of 200 Becquerels per cubic metre (becquerels are a unit of measurement for radioactivity) over long periods of time have a higher risk of developing cancer.

The good news is that the new home warranty in Ontario, provided by your builder and administered by Tarion, provides coverage if excessive radon levels are found in your home.

Ontario is the only jurisdiction in Canada where the builders' warranty on new homes includes radon remediation coverage. The warranty covers remediation of radon gas in excess of 200 Becquerels per cubic metre and coverage lasts for up to seven years

Testing Your Home for Radon

If you are concerned, there are two ways to test for radon: Buy a do-it-yourself radon testing kit or hire a code measurement or mitigation professional. Both parties must be certified through the

There is also a video player titled "Radon and Your New Home" and a graphic titled "DO YOU KNOW ABOUT RADON? What is radon?" with icons for testing and mitigation.



Tax Credit for Radon Measurements

Those working from home can claim the expense of testing their workspace for radon!

Learn more on our website.

www.carst.ca/HomeownerHealth#CRA



BREATHE
the lung association

Radon Action Examples in Canada:

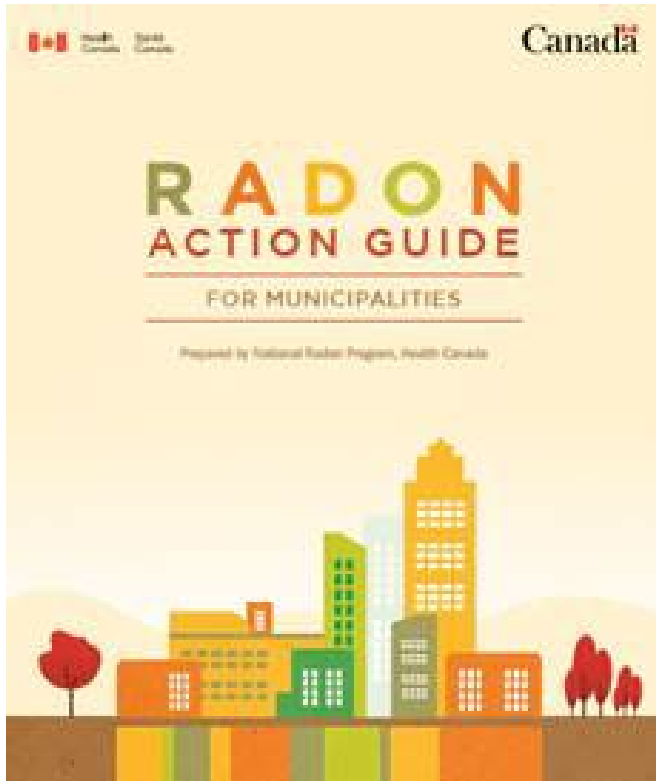
Across Canada, some actions taken by governments and other institutions include:

- Radon reduction requirements in building codes,
- Promoting radon awareness and testing on websites,
- Testing of public buildings: government offices, schools, daycares, and social housing,
- Inclusion of radon in real estate Property Disclosure Statements and guidance on professional obligations for real estate agents to treat radon as a latent defect,
- Coverage for elevated radon in New Home Warranty claims,
- Requirement of radon mitigation in rental properties by some tribunals for landlord-tenant disputes; and,
- Clarifying guidelines for radon in the workplace.



Radon Action Guides - Health Canada

Health Canada's National Radon Program has developed Radon Action Guides designed to help provinces, territories, and municipalities across Canada develop programs and policies to address radon.



<https://www.canada.ca/en/health-canada/services/health-risks-safety/radiation/radon/action-guides/municipalities.html>

The Radon Action Guide for Municipalities describes:

- why municipalities should take action
- how to create radon action strategies
- important steps to take to reduce radon-induced lung cancer in communities

Municipalities can become leaders in advancing radon action through:

- policy development
- education and awareness
- creating databases and maps
- supporting community testing
- enforcing radon provisions in Building Codes



Radon Action Guide:

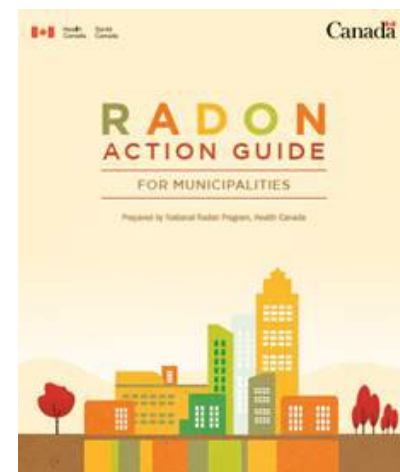
How to create radon action strategies?

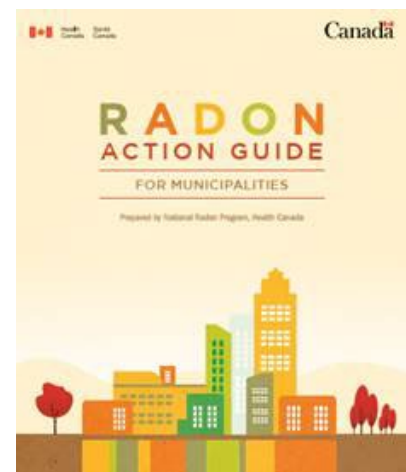
Every good strategy, starts with a plan.

- Develop RADON PLANS and include collaboration, consultation, partnerships, and independent organizations that have a strong presence at the local level and can play an important role concerning radon.

Core features of a Radon Action Plan, include:

- Delivering annual public education and awareness campaigns during November, Radon Action Month in Canada.
- Conducting community testing to gain better understanding of local radon levels.
- Adopting goals of reducing indoor radon exposure in the community.
- Establishing specific bylaws and operating policies covering building code enforcement, rental accommodation, municipal owned buildings, and publicly accessible places.
- Consider selling test kits as a way to increase testing, provide low cost options and collect radon data in their communities.
- Consider setting up a radon monitor lending program





Radon Action Guide continued:

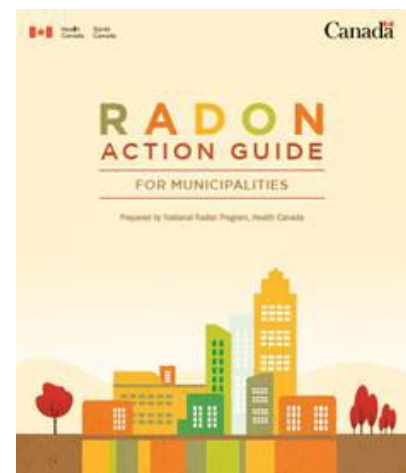
Important steps to take to reduce radon-induced lung cancer in communities

Risk management: Municipalities are employers, building owners and operators and at times landlords - general duties to ensure spaces are safe. Municipalities are also subject to a duty of care when inspecting buildings.

- Municipality owned/occupied buildings for radon and reduce high levels
- Provide training to building officials on updated building codes with respect to radon
- Addressing radon in social housing is an ethical and socially responsible action for municipalities to take. In some cases, municipalities may also control schools, daycares, and other facilities for which radon action is also important.

Increasing value of building stock: Certified mitigators can reduce radon levels to safe levels, which can become a selling feature because it assures users and owners that radon has been dealt with, increasing the value of the home or business.

- Support local business development and encourage local companies to become C-NRPP certified
- Provide financial support through grants/subsidies to support the cost of radon mitigation



Radon Action Guide continued:

Legal Powers: Most provinces' municipal legislation mentions protecting health and safety as part of the general purposes of a municipality or allows for bylaws concerning health.

Municipalities enforce areas which make up core components of radon policy, including:

- building codes
- construction permits
- standards of maintenance for rental accommodation
- air quality in indoor public spaces (as is currently done for smoking)



Thank you for your participation in this program!

www.takeactiononradon.ca

@actiononradon



Canadian
Cancer
Society

