

Radon Reduction in Canada



Building Momentum through Collaboration

APRIL 2019



National Radon Program – a Decade in Review

Look How Far We've Come!



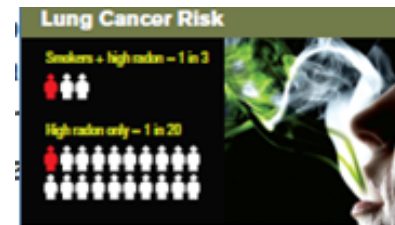
2008-2010 – PROGRAM DEVELOPMENT

- Developed outreach materials and public outreach programs
- Started characterizing the extent of the radon problem in Canada – research, cross-Canada and Federal Building testing
- Started engaging key stakeholders
- Increased availability of testing resources and supported changes to NBC



2011-2013 – COLLABORATION – DEPTH & BREADTH

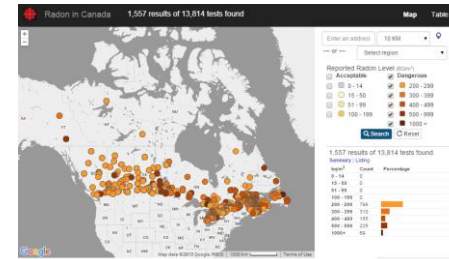
- Institutionalized good radon practices in Canadian industry – CARST, C-NRPP and expanded research
- Built on the strong base – expanded and strengthened partnerships, refined risk messaging, developed targeted outreach programs and establishing RAM
- Program review and evaluation – internal and POR



National Radon Program – a Decade in Review

2014-2017 – WATERSHED ADVANCEMENT and EVALUATION

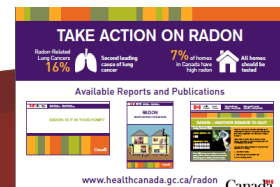
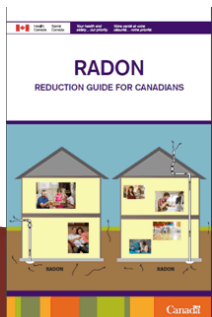
- CBC special report in June 2014 – National media exposure = HUGE increase in public interest
- Mike Holmes and Mike Holmes Jr as a spokesperson and Champion
- Growth of the T AoR Network and RAM – regional and provincial committees and leaders
- Significant increase in provincial/territorial/municipal and community engagement and action



AMAZING PROGRESS THANKS TO THE INCREDIBLE STAKEHOLDER INVOLVEMENT AND ACTION!!

2018 and Beyond

- **Focus** on behaviour change – motivating / influencing testing and mitigation rates across Canada.
- **Targeted** efforts for at risk regions and populations



PARTNERS



Radiation Safety Institute of Canada
Institut de radioprotection du Canada
CELEBRATING 35 YEARS



Santé et Services sociaux Québec



northern health



Canadian Environmental Law Association
EQUITY. JUSTICE. HEALTH.

children's health & environment



partenariat canadien pour la santé des enfants et l'environnement



Canadian Cancer Society / Société canadienne du cancer



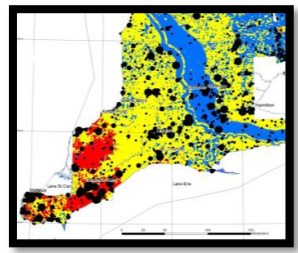
Targeted Projects and Programs



Testing Programs



Radon Mitigation Standards



Radon Spatial Analysis and Data Sharing



Health Canada **Save Canada** **Your health and safety, our priority** **With spirit and with science, more people**

RADON - ANOTHER REASON TO QUIT

Lung Cancer Risk

Smoking? Test Your Home for Radon

Radon + Smoking = Lung Cancer Combination

For more information, visit us at: www.health.gc.ca/radon or 1-877-947-7463

Canada 125



Home safety for your KIDS' sake

Check it ✓ today:

- Smoke Detector
- Carbon Monoxide Detector
- Radon Test

www.healthyenvironmentforkids.ca

THE LIVING LABOURATORY

Provincial / Territorial / Municipal Progress



Radon mitigation warranty



School testing
SK, NB, NS, YK, PEI, QC



Building Codes



Radon Burden of illness study



Mandated daycare testing

Ministry of Health and Long-Term Care

Protecting and Promoting the Health of Ontarians

Ontario Public Health Standards: Requirements for Programs, Services, and Accountability

The Ontario Public Health Standards: Requirements for Programs, Services, and Accountability are published as the public health standards for the provision of mandatory health programs and services by the Minister of Health and Long-Term Care, pursuant to Section 7 of the Health Protection and Promotion Act.

Effective: January 1, 2018
Revised: July 1, 2018



Potential for Radon in Indoor Air Map

RADON AWARE



THE LEGISLATIVE ASSEMBLY OF ALBERTA

BILL 209

RADON AWARENESS AND TESTING ACT

Québec

SANTÉ MONTRÉAL

Novembre
mois de la
sensibilisation
au RADON



Training and engagement



Radon Gas Mitigation Program

Radon Outreach and Education in Canada

TAKE ACTION ON RADON

Radon-Related Lung Cancer **16%** Second leading cause of lung cancer

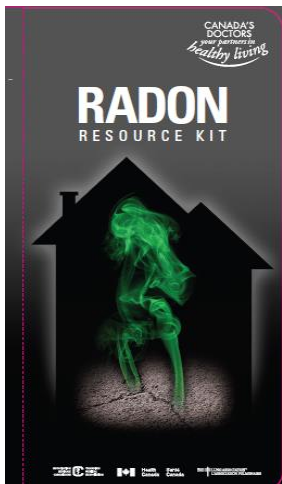
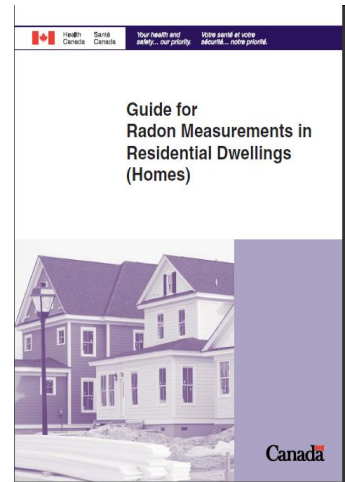
7% of homes in Canada have high radon

All homes should be tested

Available Reports and Publications

www.healthcanada.gc.ca/radon
radon@hc-sc.gc.ca - 1-866-225-0709

HC Outreach Efforts	2008-2018
Outreach materials distributed	>8,200,000
Web page views	>1,400,000
Public inquiries	10,000
Outreach events	➤ 1100
Media exposure	>6000



TAKE ACTION ON RADON

Radon is an invisible, radioactive gas that comes from the ground

Radon is the **2nd** LEADING CAUSE of LUNG CANCER

3000⁺ PEOPLE/YEAR die from radon-induced LUNG CANCER

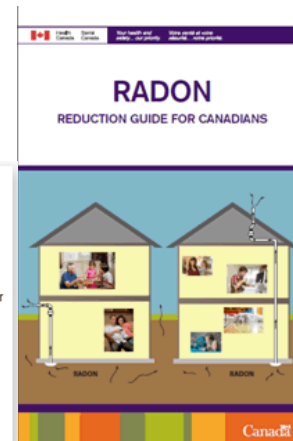
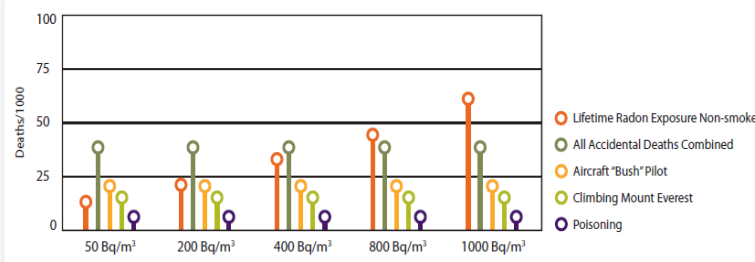
Radon is in ALL buildings

The only way to know how much radon is in your home is to TEST

Radon is easy to TEST and easy to REDUCE

RADON: IS IT IN YOUR HOME?

Canada



HOW TO REDUCE RADON IN YOUR HOME

- HIRING** a certified professional LOWERS RADON BY UP TO **90%**
- INCREASING** home ventilation LOWERS RADON BY **25-50%**
- SEALING** cracks LOWERS RADON BY LESS THAN **15%**

Recent research found that **ONLY 29% OF CANADIANS** with high RADON in their home took action to REDUCE it

TEST and REDUCE RADON to protect against lung cancer

www.takeactiononradon.ca

Increased awareness is not directly translating into action

Look how much further we have to go!



2017 Statistics Canada Household and Environmental Survey results		2009	2011	2013	2015	2017
		Percent				
Canada	Households that had heard of radon	42	40	45	55	49
	Gave correct description of radon	30	37	53	59	63
	Said radon is a health hazard	68	73	74	76	77
	Had tested for radon	3	5	5	6	7
British Columbia	Households that had heard of radon	41	46	42	55	52
	Gave correct description of radon	28	32	52	52	56
	Said radon is a health hazard	66	70	67	77	77
	Had tested for radon	F	3	4	6	8
Halifax, Nova Scotia	Households that had heard of radon	..	..	68	65	74
	Gave correct description of radon	..	..	54	68	65
	Said radon is a health hazard	..	..	72	87	91
	Had tested for radon	..	..	F	18	22
Calgary, Alberta	Households that had heard of radon	..	..	41	66	62
	Gave correct description of radon	..	..	59	52	68
	Said radon is a health hazard	..	..	73	71	74
	Had tested for radon	..	..	F	F	10

The National Radon Program Mitigation Actions Follow-up Study (2016) found that only 29% of Canadians are taking action to reduce high radon levels in their homes

Building Behaviour Change Momentum

Increasing testing and mitigation rates

Take the decision to Take Action out of people's hands

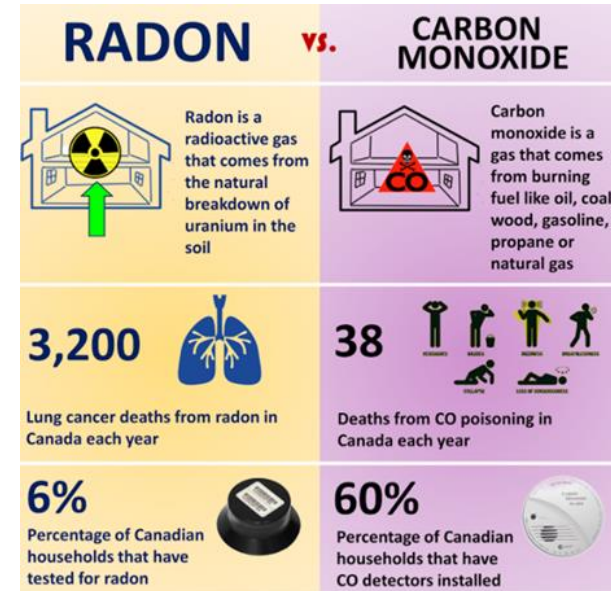
- Integrate testing and mitigation into legislation and standards – ex. Passive stack included in all Building codes
- Mandatory testing

Make the threat more “real”

- Target efforts towards at risk regions and populations.
- Evidenced-based risk = Provinces, Territories and Municipalities more likely to change the way they think about radon risks
- Deliver more and bolder messaging and campaigns

Make Taking Action less Scary and Easier

- Correct misconceptions and make costs easier to bear
- Make more free/ subsidized testing available



2018 POLICY SCAN

REGULATORY AND ENFORCEMENT LANDSCAPE

- It is recognized that Health Canada has provided important leadership in addressing radon risks under the National Radon Program **BUT**
 - Compliance with the federal Radon Guideline is **voluntary** - no requirements exist for mandatory action (for testing, disclosure of test results, or remediation).
 - There is divided and overlapping **jurisdiction** on radon in law and policy across Canada
 - **Very little radon protection is encoded in law**, it is generally captured by provincial/territorial building codes and, at the federal level, in the Canada Labour Code.
 - **Inconsistent approaches** and engagement across Canada at the PT and Municipal level – different levels of government not always working well together



2018 RADON POLICY SCAN

Canada vs European Union

National Radon Program

- Guidance/Advice
- Research and Surveys
- Training and Education

Federal government cannot similarly require P/T action

EU Basic Safety Standards Directive

- Requirements of member states to:
 - Set guideline
 - Education and outreach
 - Radon Action Plans targeting at-risk
 - Systems of inspection and enforcement

RECOMMENDATION

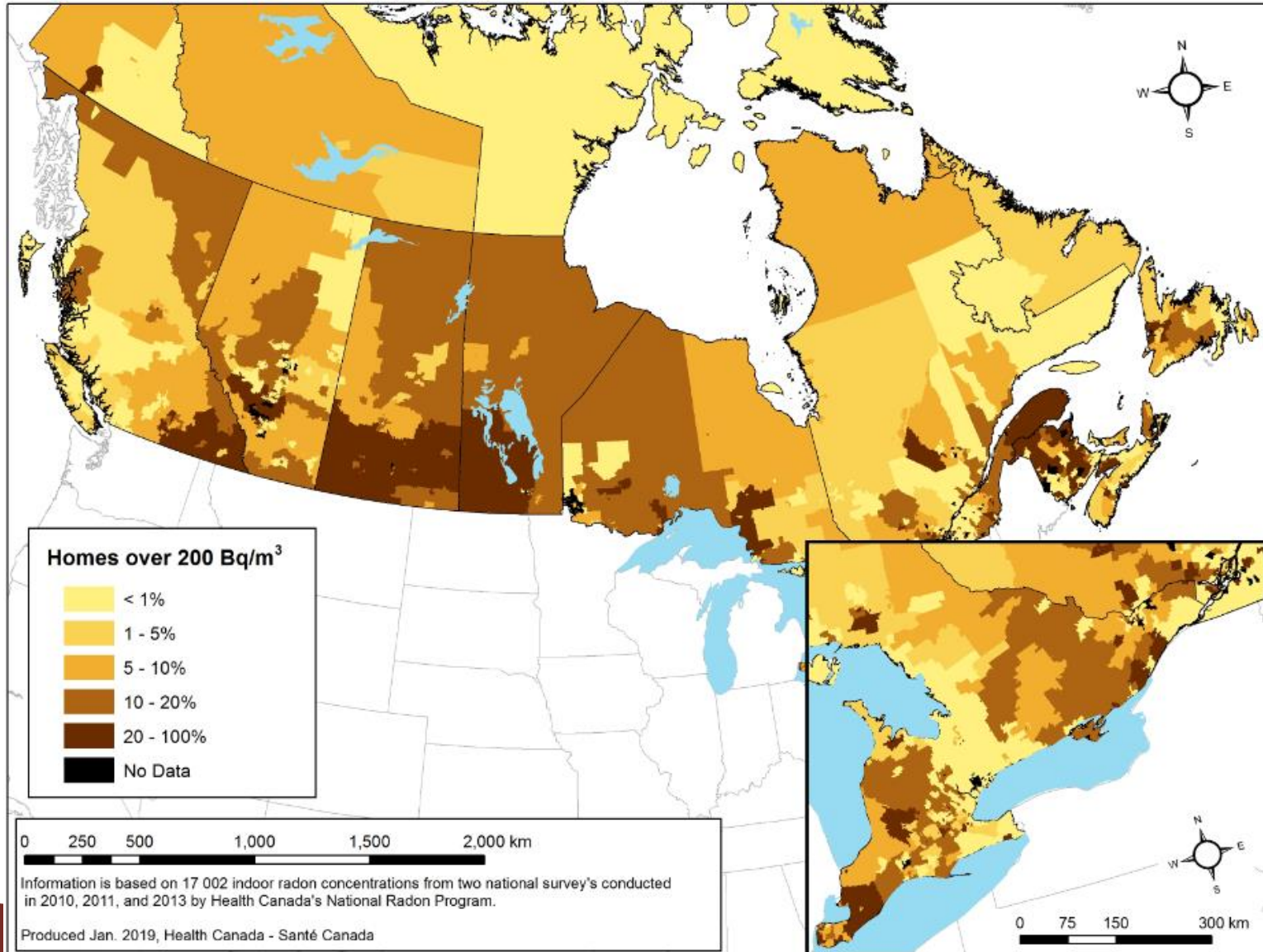
A BOLDER and more COHESIVE Approach

- Encouraging and enabling a more comprehensive and coordinated pan-Canadian radon strategy
- Expand current focus on research, education/outreach
- Provide increased direction/advice/toolkits (add federal tax credit/grants)
- Federal and PT Radon Action Plans to capture multiple areas of P/T jurisdiction

NRP RADON REDUCTION PRIORITIES

- Updating **Building codes** to reduce radon in new construction – ex. inclusion of passive stack
- **Radon mapping** and spatial analysis to better define at risk regions and populations across Canada
- **Radon Health Economic Analysis** – Looking practical radon interventions – measured in ‘quality adjusted life years’ (qualys)
- Updating the **Federal Radon Action Plan** – engaging other relevant departments more formally
- Creating **Radon Action Plan** Toolkits -A ‘turn-key’ resource that PTs and Municipalities can use to develop customized Radon Action Plans
- Radon **Behaviour Change research** pilot – working with a Behavioural Scientist

TARGETING EFFORTS and FILLING GAPS



WHAT SEEMS TO BE WORKING TO CHANGE BEHAVIOUR IN CANADA



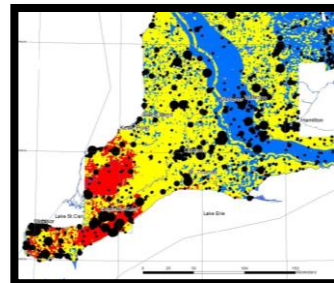
Standards, community engagement



COMMUNITY
Testing programs



Library test kits



Targeting Radon Risk Areas



Real Estate



Building codes

Thank You

