TAKE ACTION ON RADON SASKATCHEWAN

Radon in Saskatchewan

JENNIFER MAY – THE LUNG ASSOCIATION

JEFF ZIMMER – SASKATCHEWAN RESEARCH COUNCIL

Health Canada shout out!

BREATHE
the lung association
BREATHE
the lung association
RADON TEST KITS SOLD
AT SK.LUNG.CA/RADON
RADON IS THE
2ND LEADING
CAUSE OF
LUNG CANCER
PROTECT YOUR
LOVED ONES

Radon Test Kits and Analysis

The Lung Association in SK sells the radon test kits for $50, which includes analysis.

We have had an agreement with the Saskatchewan Research Council who does the analysis for us, and have since 2010.

They are an active partner on our Coalition.

TAKE ACTION ON RADON SASKATCHEWAN

The Take Action on Radon Saskatchewan Coalition was formed by The Lung Association of Saskatchewan in May 2015.

Vision: Reduce the risk for radon-related lung cancer in Saskatchewan through education, outreach, testing and mitigation.

TAKE ACTION ON RADON

SASKATCHEWAN

Mission:

- To come together united as **one voice to educate the public** about radon, and to encourage all residents of our great province to test for and reduce radon levels in their homes and work places.
- To have a roundtable of **radon stakeholders**.
- **Brainstorming** for determining potential opportunities for where/when appropriate discussion might occur to enable change to lower radon exposure risks.
- To share and **collaborate** information, knowledge and experiences and intiatives..

RADON
A simple test can save
family
Canada
www.healthcanada.gc.ca/radon

SK Coalition Members

Chair: The Lung Association, SK

TAKE ACTION ON RADON
SASKATCHEWAN

FEDERAL GOVERNMENT

- Health Canada, SK-MB Region

PROVINCIAL GOVERNMENT

- Ministry of Health, Population Health Branch
- Ministry of Labour and Workplace Safety
- Radiation Safety
- Saskatchewan Health Region

HEALTH CHARITIES

- Canadian Cancer Society, SK Division
- The Lung Association, SK

TAOR SK Coalition Members

RADON TESTING PARTNERS

- Saskatchewan Research Council
- Radiation Safety Institute

BUILDING INSPECTION PARTNERS

- Saskatchewan Building Officials Association
- Synergy Home Inspections

TAKE ACTION ON RADON SASKATCHEWAN

SK Coalition Members

TAKE ACTION ON RADON SASKATCHEWAN

MITIGATION PARTNERS

- CNRPP: Canadian National Radon Proficiency Program
- CARST: Canadian Association of Radon Scientists and Technologists

- Master Radon
- Sun Ridge Residential Incorporation
- Ranger Radon Services
- Got Mold
- Swift Plumbing and Heating
- Hawtin Plumbing Services
- Radon Care
- Pinchin
- Atomic Radon Mitigation

SK Coalition Members

SPONSORSHIPS

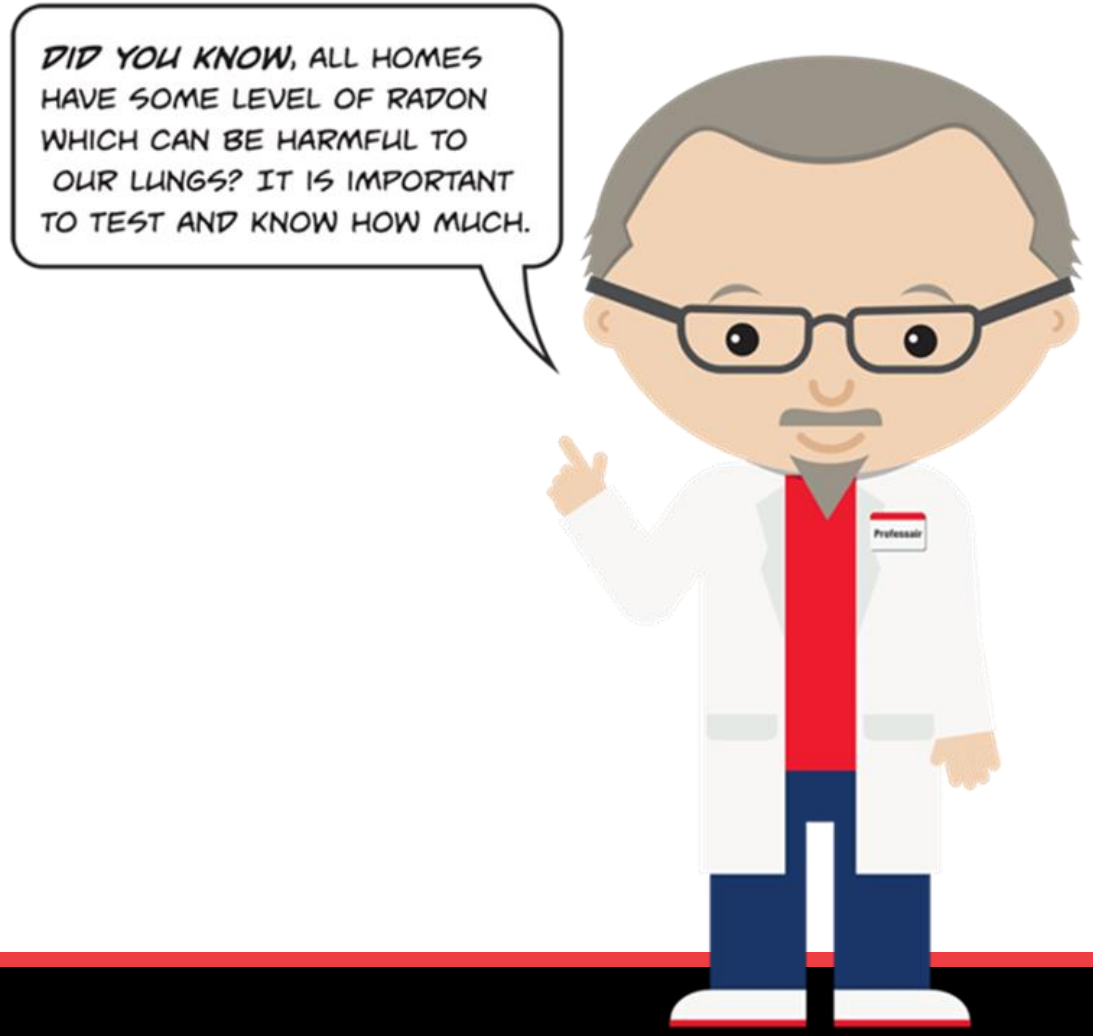
- Regina Public Libraries
- Stonebridge Centre Partnership
- North Prairie Developments
- Saskatoon & Region Home Builders Association
- RANA Home Oxygen Group

TAKE ACTION ON RADON
SASKATCHEWAN

Advocacy – MLA reception

Community Presentations

Promoting Radon Testing

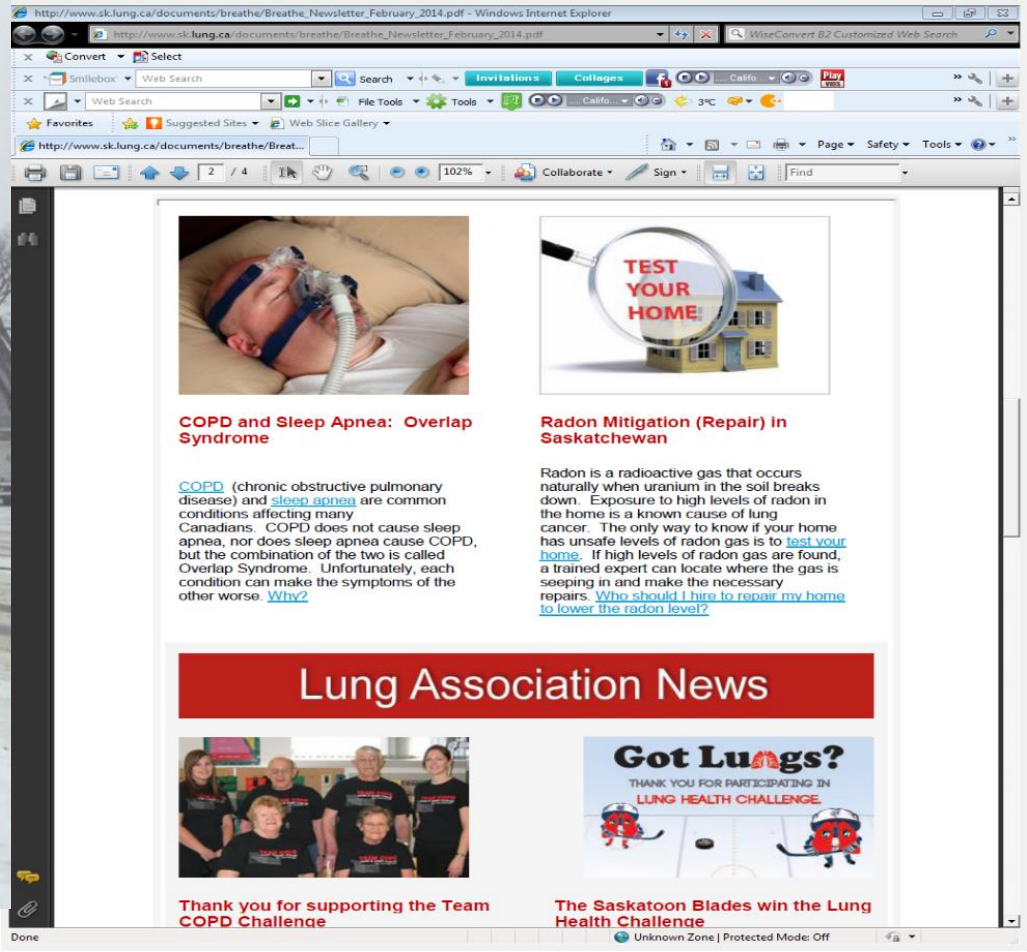


TAKE
ACTION
ON RADON
SASKATCHEWAN
Radon:
The second leading cause of lung cancer.
How much RADON is in your home?
Test. Reduce.
Breathe Easy.
sk.lung.ca/radon

LUNG CAPACITY TESTING
VOLUNTEERS
SIAST KELSEY CAMPUS
HEALTH FAIR
hosted by Health Services and Campus Recreati
SIAST
THE LUNG ASSOCIATION
RADON
The second leading cause of
lung cancer!
TEST YOUR HOME
It's odourless.

THE LUNG ASSOCIATION™

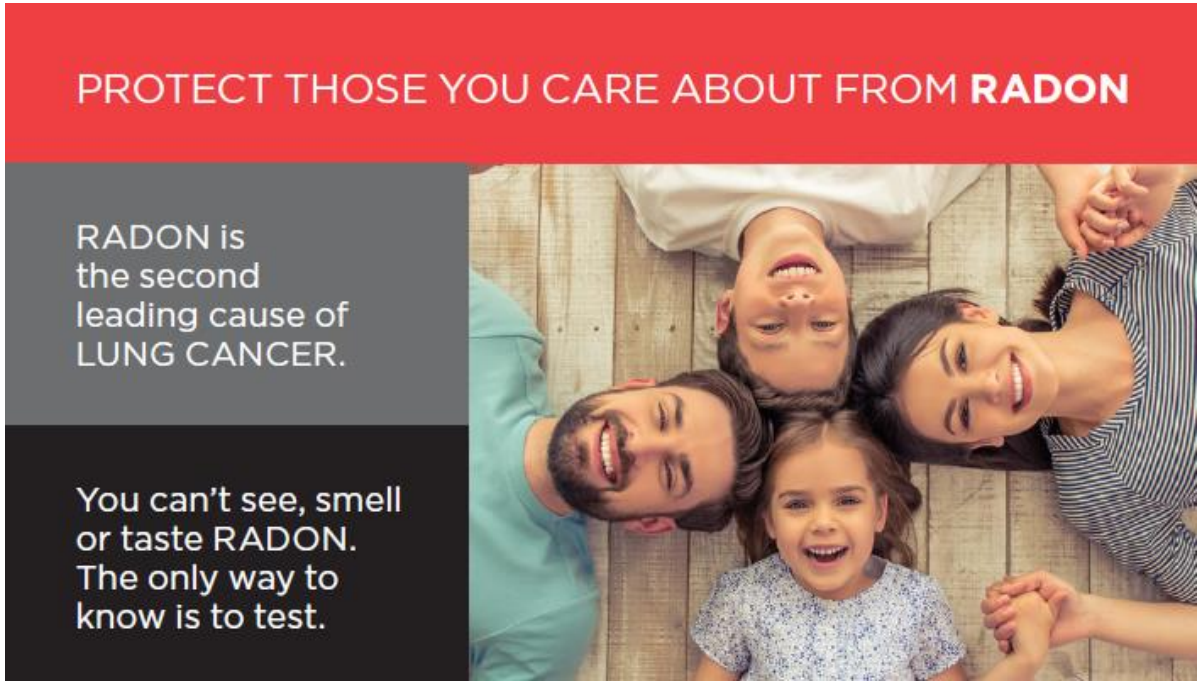
Breathe Newsletter



Conferences and Home Shows

Radon Business Cards

Radon business cards were developed and thousands were given out at radon outreach events to raise awareness about radon and to remind people to test their homes and workplaces for radon.



Radon Business Card Front

Radon Business Card Back

Radon Social Media Posts

Media Coverage

Radio Ads

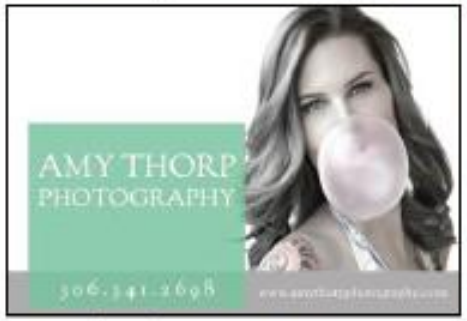
To help launch Take Action on Radon Month, we partnered with Regina and Saskatoon Radio Stations to raise awareness about radon and to encourage people to test their homes for radon.

Saskatoon Lung Association,
How Much RADON is in Your home?

By Jill Hubick, BKin, BSN, RN, CRE

The Lung Association can help you test for this deadly gas so you and your loved ones can breathe easy.

BREATHING PASSION AND COMPASSION: The Lung Association's reason for being can really be summed up in one word: Breathe. It's what unites all of us. It's what inspires the organization. And it's what keeps their community of physicians, scientists, clinicians, educators, administrators, volunteers and donors so committed— whether it's searching for cures to lung diseases, teaching kids about the dangers of tobacco, or fighting for clean air. The Lung Association is the leading organization in Canada working to promote lung health and prevent and manage lung disease. The Lung Association improves lung health one breath at a time by funding vital research and pushing for innovative ways to help people manage their health.



What is radon?

Radon is a radioactive gas and Saskatchewan is a hot spot. It is created naturally as the uranium in the ground breaks down. Radon is invisible; you can't see, taste it or smell it. All homes have some levels of radon. The question is how much and the only way to know is to test.

How can radon get into your home?

Radon can seep into your home through cracks in the foundation, pipe openings, and other places where the house is open to the ground. In confined spaces like a house, radon can build up to high levels. There are no safe levels of radon; however the higher the level, the greater the health risk. Health Canada, wants all Canadians to have as low as possible radon levels. They recommend to reduce radon levels if your home is over 200 Becquerel's per cubic meter (200 Bq/m3).

What are the health risks?

Radon is the second leading cause of lung cancer after smoking. People who smoke and are exposed to radon have an even higher risk of lung cancer. The health risk from radon is long-term not immediate. The longer you are exposed to high levels of radon, the greater your risk.

How do I test my home for radon?

Testing for radon is easy and inexpensive. The Lung Association offers long-term radon test kit which are approved by Health Canada. Long term kits usually analyze over three months and it is best to test in the winter cooler months when you home is mostly closed up. Simply place your radon test in the lowest level of your home where you spend on average four or more hours a day. You can contact the Lung Association at 1-888-566-LUNG or sk.lung.ca.

My home tested above 200 Bq/m3, what now?

If the radon level in your home is high, you can fix it. The higher the radon level in your home, the sooner it should be fixed. There are many ways to bring down your radon levels. Some of these methods include sealing major entry routes such as open sumps, floor drains, floor wall joins, exposed soil, voids in concrete block walls, and increasing mechanical ventilation. Professionals can also install active depressurization systems by installing a pipe through the foundation floor slab below the home and release it into the outdoors where it is quickly diluted. This system also reverses the air pressure difference between the house and soil, reducing the amount of radon that is drawn into the home through the foundation. There are certified radon professionals that are experts in reducing radon levels right here in our province. Visit takeactiononradon.ca to find a certified radon expert near you.

Radon Reduction Sweepstake! Enter to WIN!

Homeowners that have tested their home for radon and taken action to reduce levels to below the Health Canada recommended guideline of 200 Bq/m3 have a chance to receive a rebate for up to $1,000 towards the cost of the mitigation (radon reduction) system in their home. For more visit sk.lung.ca or takeactiononradon.ca

the lung association

Radon Article in Saskatoon Home Magazine Fall Edition

https://issuu.com/saskatoonhomemagazine/docs/skhomefall2017_a433adf6e390f4/42

ASHLEIGH MATTERN

RADON ON THE RISE

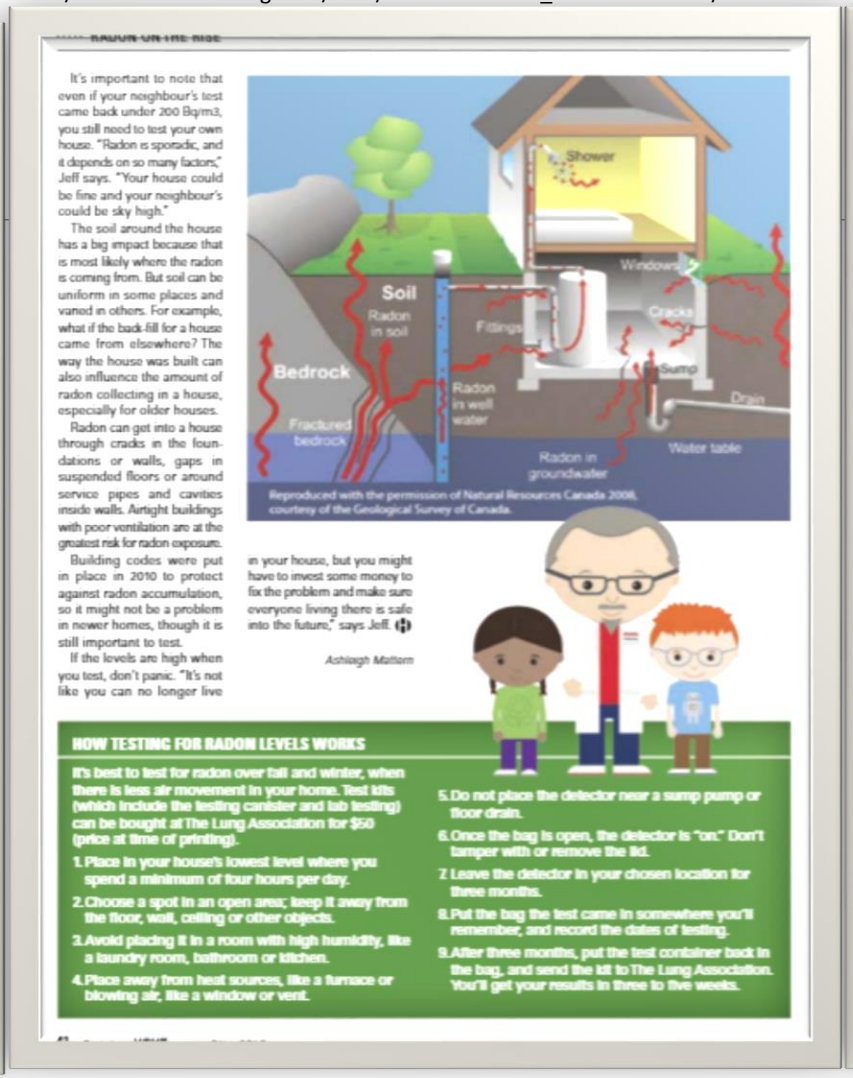
Testing for an Invisible Killer

Why should you care about the radon levels in your home? Radon is a radioactive gas created from the natural breakdown of uranium. Exposure to excess amounts is a major cause of lung cancer, second only to smoking. And the odourless, colourless, radioactive gas can collect in your home with no warning signs. The only way to know how much radon you have inside your home is to test for it.

Radon test kits are now much more easily accessible than in years past, with organizations like The Lung Association making them available at a nominal cost. "We would like people to understand the importance of it," says Jennifer May, vice-president of health promotion with The Lung Association. "Just as you would use a carbon monoxide or smoke detector, we want you to think about radon detection."

Jennifer says Saskatchewan is a hot spot for radon in the country. In 2012, the Government of Canada conducted a Cross-Canada Survey of Radon Concentrations in Homes, and found Saskatchewan, Manitoba, New Brunswick and the Yukon had the highest percentages of participant homes that tested above the radon guideline. About 1,200 households in three health regions in Saskatchewan participated in the study.

Radon is measured in Becquerel's per cubic metre (Bq/m3). Under 200 Bq/m3 is considered an acceptable limit by Health Canada's stan- ➤



It's important to note that even if your neighbour's test came back under 200 Bq/m3, you still need to test your own house. "Radon is sporadic, and it depends on so many factors," Jeff says. "Your house could be fine and your neighbour's could be sky high."

The soil around the house has a big impact because that is most likely where the radon is coming from. But soil can be uniform in some places and varied in others. For example, what if the back-fill for a house came from elsewhere? The way the house was built can also influence the amount of radon collecting in a house, especially for older houses.

Radon can get into a house through cracks in the foundations or walls, gaps in suspended floors or around service pipes and cavities inside walls. Airtight buildings with poor ventilation are at the greatest risk for radon exposure.

Building codes were put in place in 2010 to protect against radon accumulation, so it might not be a problem in newer homes, though it is still important to test.

If the levels are high when you test, don't panic. "It's not like you can no longer live in your house, but you might have to invest some money to fix the problem and make sure everyone living there is safe into the future," says Jeff.

Ashleigh Mattern

Reproduced with the permission of Natural Resources Canada 2008, courtesy of the Geological Survey of Canada.

HOW TESTING FOR RADON LEVELS WORKS

It's best to test for radon over fall and winter, when there is less air movement in your home. Test kits (which include the testing canister and lab testing) can be bought at The Lung Association for $50 (price at time of printing).

1. Place in your house's lowest level where you spend a minimum of four hours per day.
2. Choose a spot in an open area; keep it away from the floor, wall, ceiling or other objects.
3. Avoid placing it in a room with high humidity, like a laundry room, bathroom or kitchen.
4. Place away from heat sources, like a furnace or blowing air, like a window or vent.
5. Do not place the detector near a sump pump or floor drain.
6. Once the bag is open, the detector is "on." Don't tamper with or remove the lid.
7. Leave the detector in your chosen location for three months.
8. Put the bag the test came in somewhere you'll remember, and record the dates of testing.
9. After three months, put the test container back in the bag, and send the kit to The Lung Association. You'll get your results in three to five weeks.

"OUR RADON LEVELS ARE HIGH. NOW WHAT?"

Repairs usually cost from $[illegible], and may require this work:

- Paint basement floors and walls, and use a sealant.
- Add polyethylene sheets to basement walls.
- Seal cracks and openings in the walls, floors and drains and pipes.
- If basement floor has a sub-floor, make sure it is ventilated.
- Replace an earth floor with a concrete floor.
- Increase the ventilation where radon may accumulate.
- Install sub-slab ventilation, which exhausts air from beneath basement floor.

From The Lung Association.

dards, though Jennifer says testing should be done every three to five years as the conditions that cause radon accumulation can change. If you test between 200 and 600 Bq/m3, you should making changes to your home in the next two years; if you test over 600 Bq/m3, you should address these issues in your home within one year.

Radon levels will never be zero, but some houses will see numbers as low as <20 Bq/m3. On the opposite end of the spectrum, Jennifer says they have seen numbers in Saskatoon in the >1,000 Bq/m3 range.

The Lung Association has partnered with the Saskatchewan Research Council (SRC) to provide the test kits. Unlike cheaper test kits that you might find in a hardware store, the price of these kits includes the analysis from the SRC.

Jeff Zimmer, SRC laboratory manager, says increasing awareness for the problem is key because radon is not something you can perceive with your senses. That awareness is improving. Jeff says the SRC has been doing radon testing since the late '80s, but back then they only received 20 to 100 tests per year. Now they receive thousands. ➤

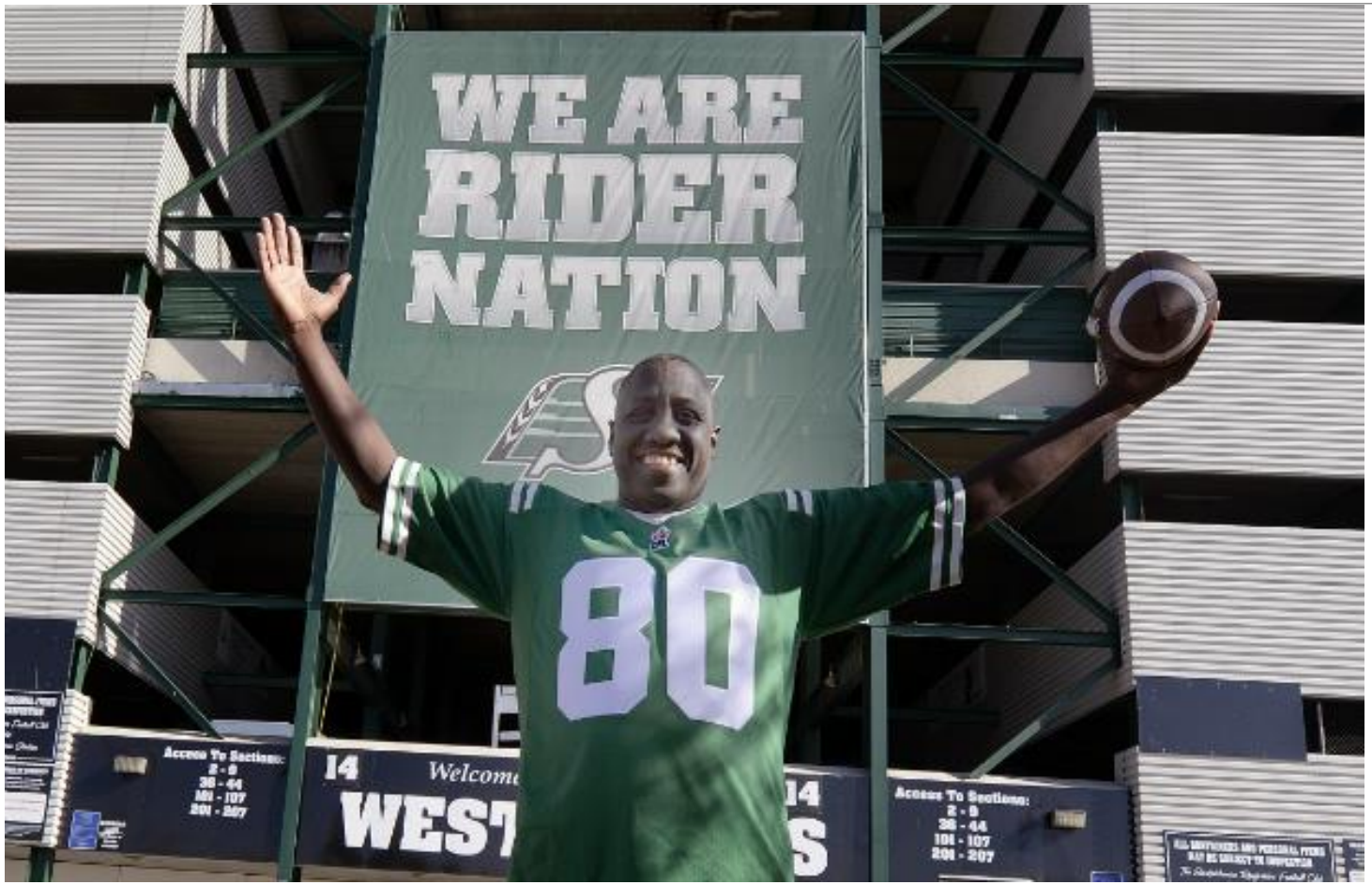
WHAT IS RADON?

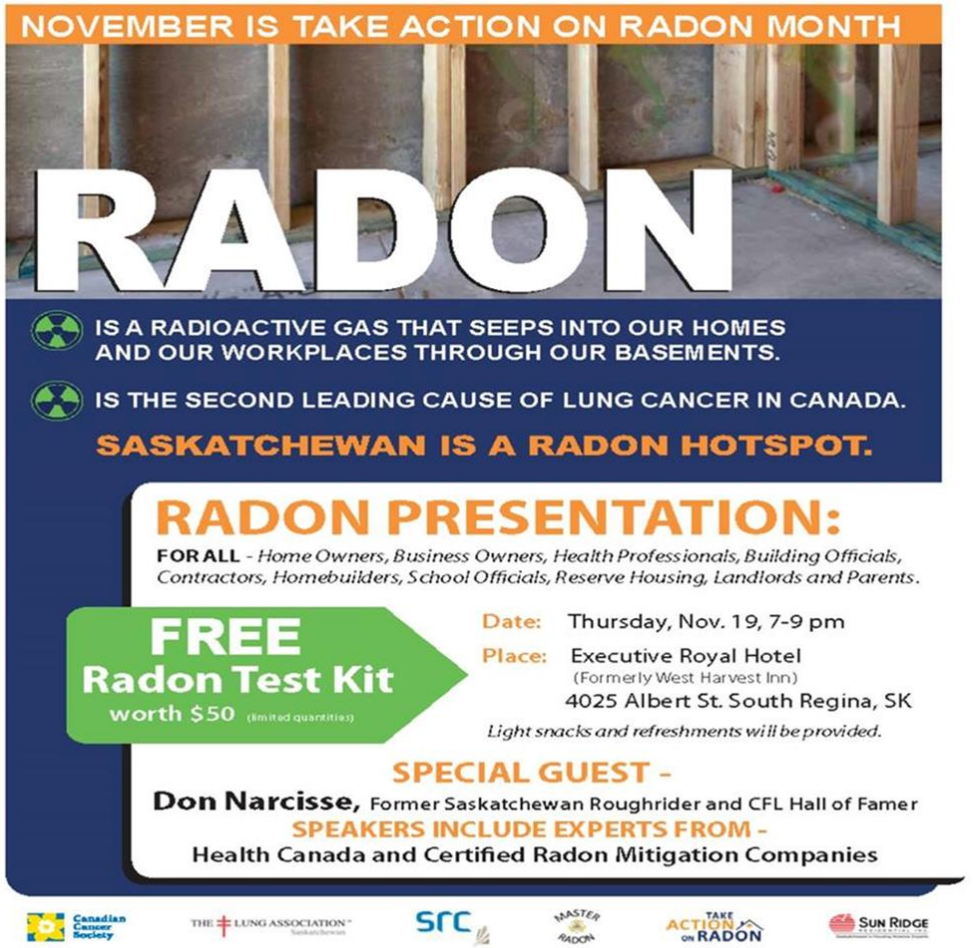
Radon is a radioactive, colourless, odourless, and tasteless gas. It's formed through the natural radioactive decay of elements like uranium found in soil, rock and water. The gas escapes from the ground into the air, and can be a problem if it becomes trapped in a closed-in space like a house. Inhaling radon damages the lungs, and long-term exposure can lead to lung cancer—radon is the second leading cause of lung cancer after cigarette smoking.

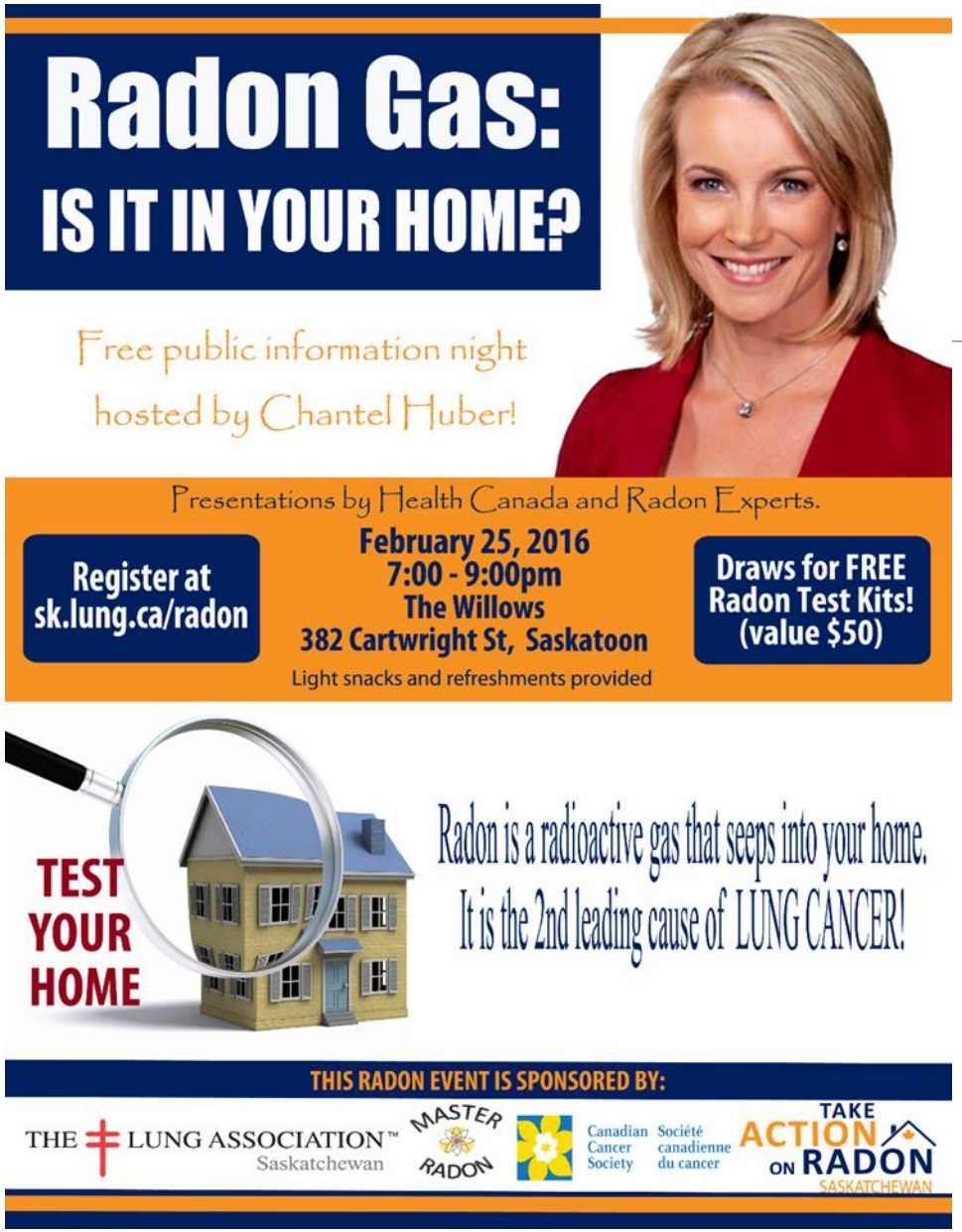
This magazine goes to 25,000 of homes in Saskatoon!

Jennifer May (The Lung Association) and Jeff Zimmer (Saskatchewan Research Council) interviewed

Community Champions






Radon Gas:
IS IT IN YOUR HOME?
Free public information night
hosted by Chantel Huber!
Presentations by Health Canada and Radon Experts.
Register at sk.lung.ca/radon
February 25, 2016
7:00 - 9:00pm
The Willows
382 Cartwright St, Saskatoon
Light snacks and refreshments provided
Draws for FREE Radon Test Kits! (value $50)
TEST YOUR HOME
Radon is a radioactive gas that seeps into your home.
It is the 2nd leading cause of LUNG CANCER!
THIS RADON EVENT IS SPONSORED BY:
THE LUNG ASSOCIATION Saskatchewan
MASTER RADON
Canadian Cancer Society
Société canadienne du cancer
TAKE ACTION ON RADON SASKATCHEWAN

THE LUNG ASSOCIATION
RADON GAS
IS IT IN YOUR HOME?
FREE INFO
NIGHT HOSTED BY CHANTEL HUBER
FEB 25
7-9 PM
THE WILLOWS
REGISTER @ SK.LUNG.CA/RADON

Health Canada
Santé Canada
Your health and safety... our priority.
Votre santé et votre sécurité... notre priorité.
Canada
RADON
A simple test can save your family
Un simple test peut sauver votre famille
You can't see it,
ni le sentir, ni le goûter
Testing is
the only way to know
gc.ca/radon
lthcanada.gc.ca/radon

RADON

Average age group:
Public forums and kit purchasers?

1. Senior citizens

2. Grandparents

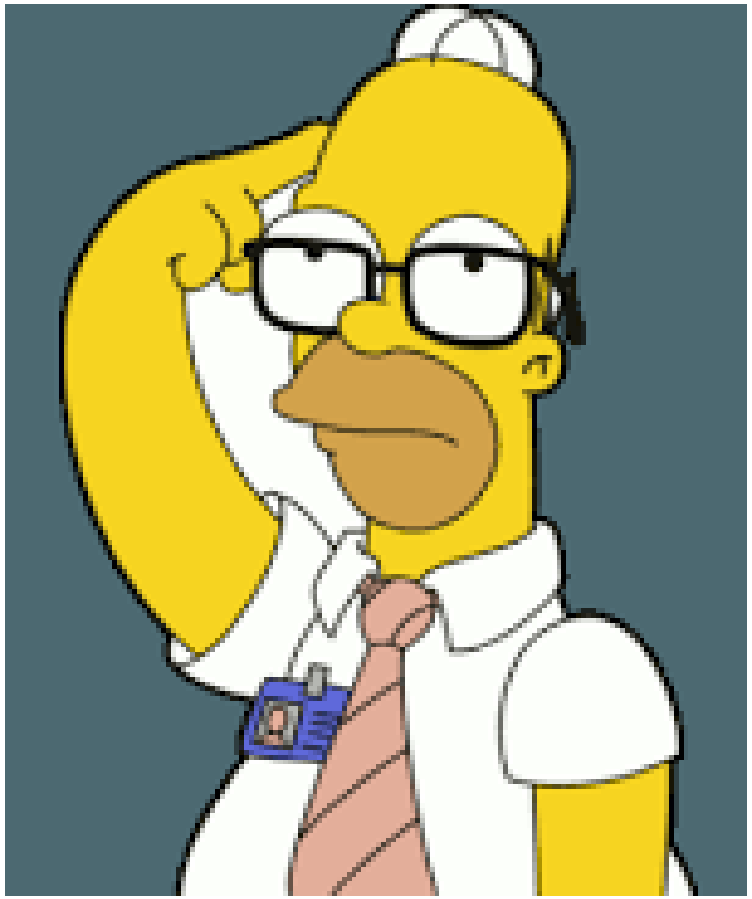
3. Pensioners

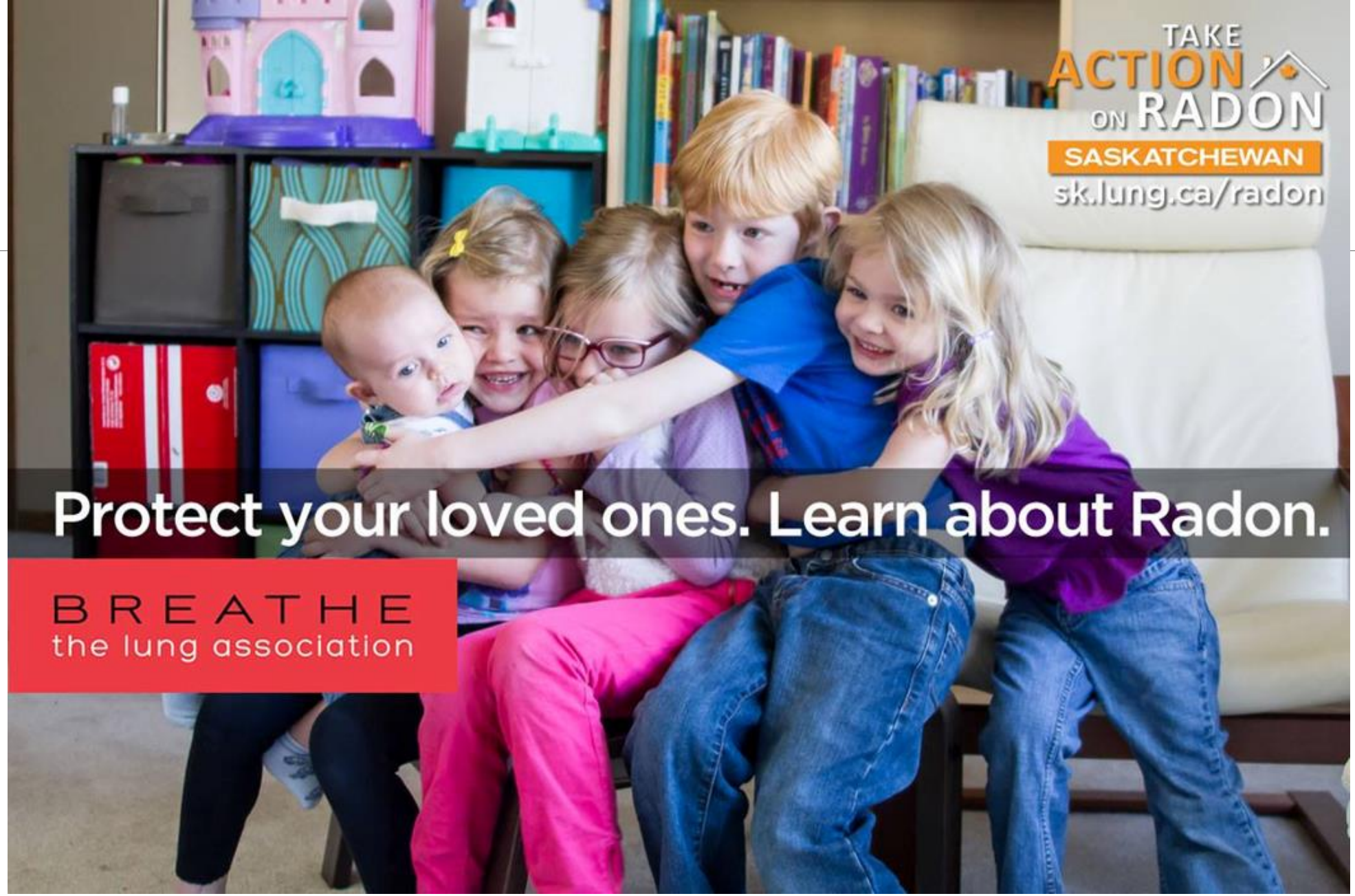
4. Retirees

5. All of the above!

QUESTION WE PONDERED:

How do we engage the younger generations/ families with little lungs in the home?

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sk.lung.ca/radon
Protect your loved ones. Learn about Radon.
BREATHE
the lung association

PROTECT YOUR FAMILY.
TEST FOR RADON.
TAKE ACTION ON RADON
BREATHE
the lung association

Goal: Test 2,017 homes in 2017 where little lungs are present.

The Little Lungs School Project was a partnership with the Greater Saskatoon Catholic Schools (GSCS) and the Saskatoon Public Schools (SPS) to create healthier homes in Saskatoon by encouraging everyone to test their homes for radon.

While there were curricula links for Grades 1-8, radon education seems to fit best into Grade 3-5 curricula in Saskatchewan.

The Little Lungs Program

Using schools as a way to:

- **Increase testing rates**
- **Build awareness**
- **Target vulnerable populations (Little Lungs)**

Newsletter Inserts for Saskatoon Elementary Schools to promote the Little Lungs Project.

Little Lungs PROJECT

TAKE ACTION ON RADON SASKATCHEWAN

Greater Saskatoon Catholic Schools

Saskatoon Public Schools

DO YOU HAVE CHILDREN SPENDING TIME IN THE BASEMENT?

Test your home for radon and make sure they are safe. Radon is the second leading cause of lung cancer in Canada, so purchase your discounted radon detector now!

RADON DETECTOR KITS:

$20 [SAVE 60%]

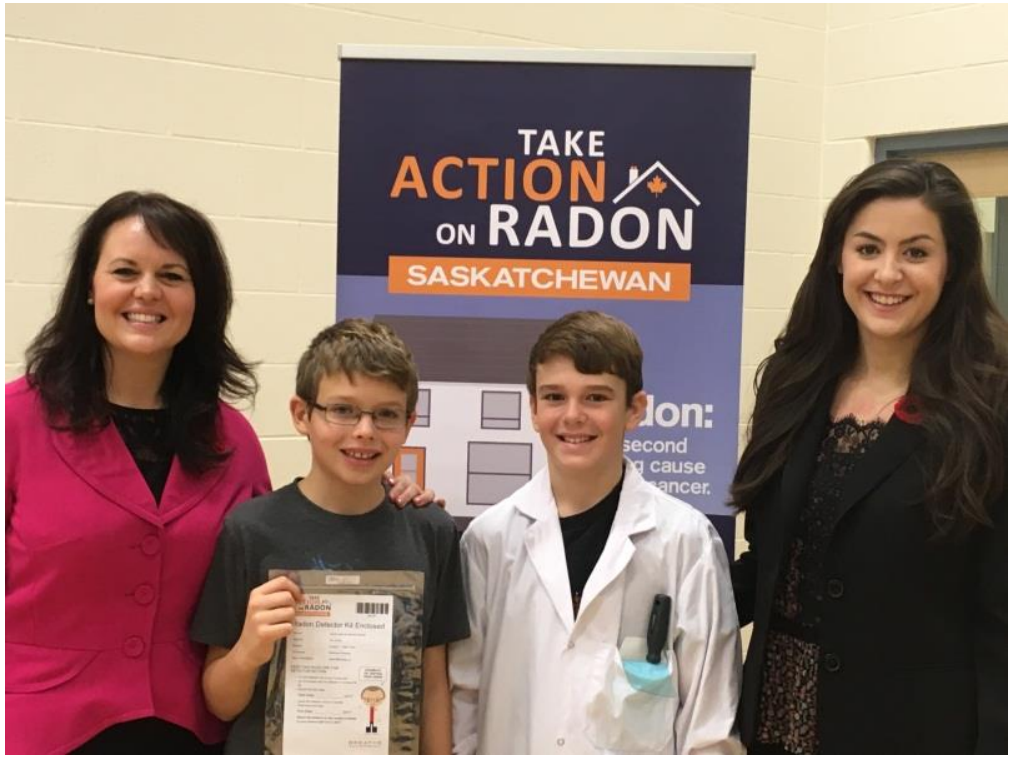
DEADLINE EXTENDED TO DECEMBER 12!

ORDER YOURS AT

littlelungs.ca

Detectors will be distributed to students January 8-14, 2017.

The media launch event was hosted at the joint Willowgrove/Holy Family Schools. There were speakers from the Take Action on Radon Coalition, both school boards, a demonstration on radon kit placement by two Grade 5 students to their peers.



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Radon
Test. Reduce.
Breathe Easy.
sk.lung.ca/radon

Little Lungs Media Coverage

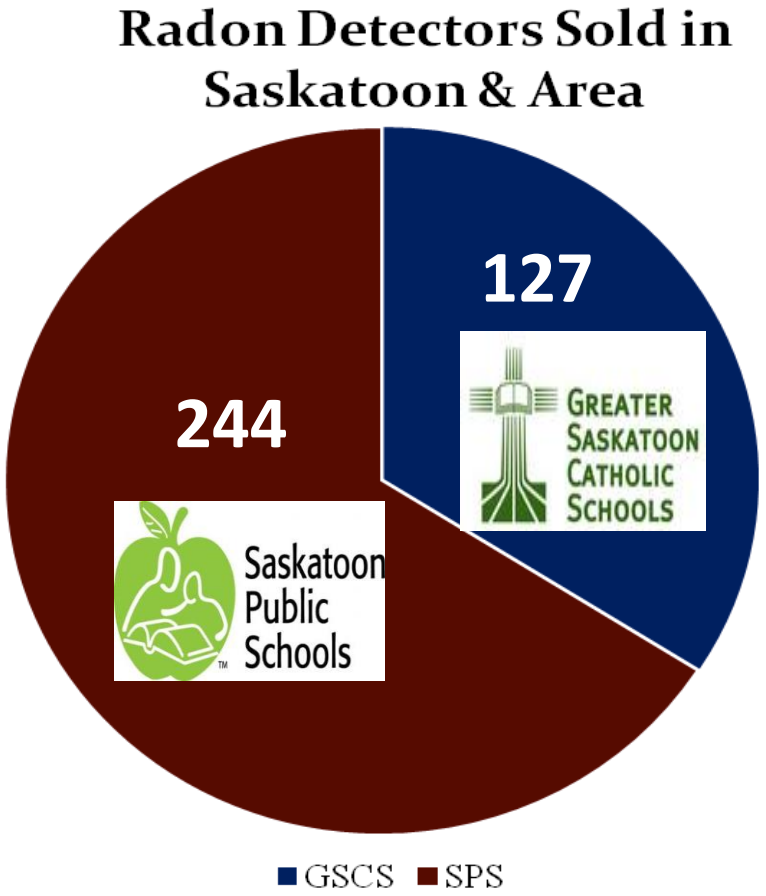
Following the media launch the Little Lungs continued to get media coverage with Kelly Meyer, Little Lungs Project Coordinator, on CTV News, ShawTV and CBC radio to further promote this project throughout the month of November.

Kelly Meyer (The Lung Association) and Jeff Rogstad (CTV News at noon)

Barry MacDougall
Director of Education
Saskatoon Public School Board

"The safety of our students is paramount, both inside and outside of school time. As a public institution, our school division understands the important role we play in sharing information with students and their families to promote their health and well-being. We are pleased to support the Little Lungs project to educate our students and raise awareness of radon exposure"

The Numbers: Radon Detectors Sold



A total of **371** radon detectors were sold during the month of November.

127 radon detectors in the **Greater Saskatoon Catholic Schools**

244 radon detectors in the **Saskatoon Public Schools**

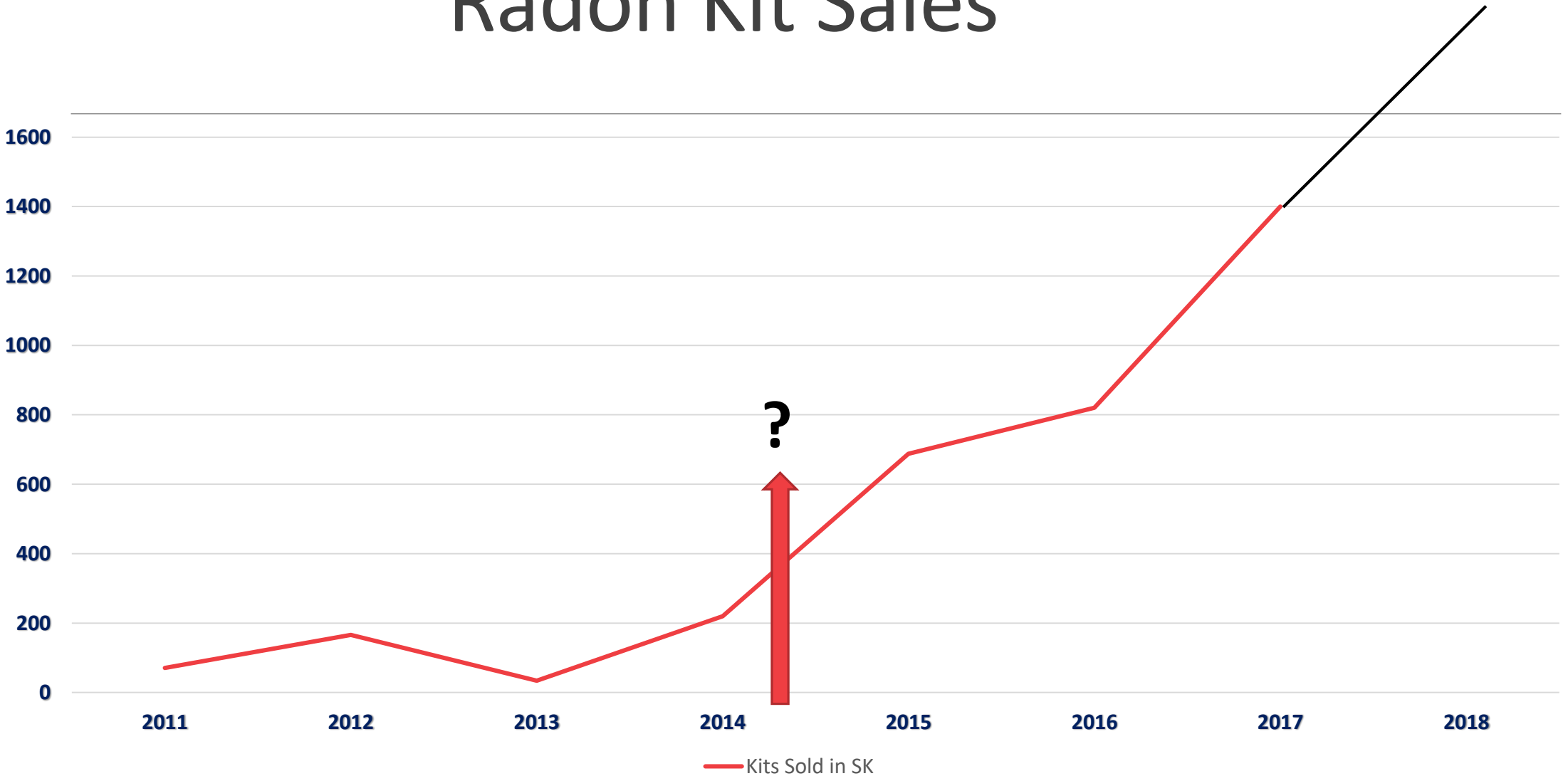
Reflection on the Little Lungs Program

We did not meet our 2,017 in 2,017 goal, however:

- **Over 4,600 website visits on the Little Lungs homepage**
- **Several tests done outside the LL project (e.g., grandparents)**
- **Builds awareness in a younger generation/young families**
- **Kit Distribution worked OK. Need to shorten the steps.**
- **Concern about families that cannot afford it – implemented a Subsidy Program**
- **Huge uptake in 'middle class' schools**
- **Target the momma bears!**
- **A champion within a certain school significantly drove testing rates**

Search
Map the Data!

Radon Kit Sales



Partnerships!
Partnerships!
Parternships!

The Lung Association had to invest in an on-line interface to take orders and keep track of sales.

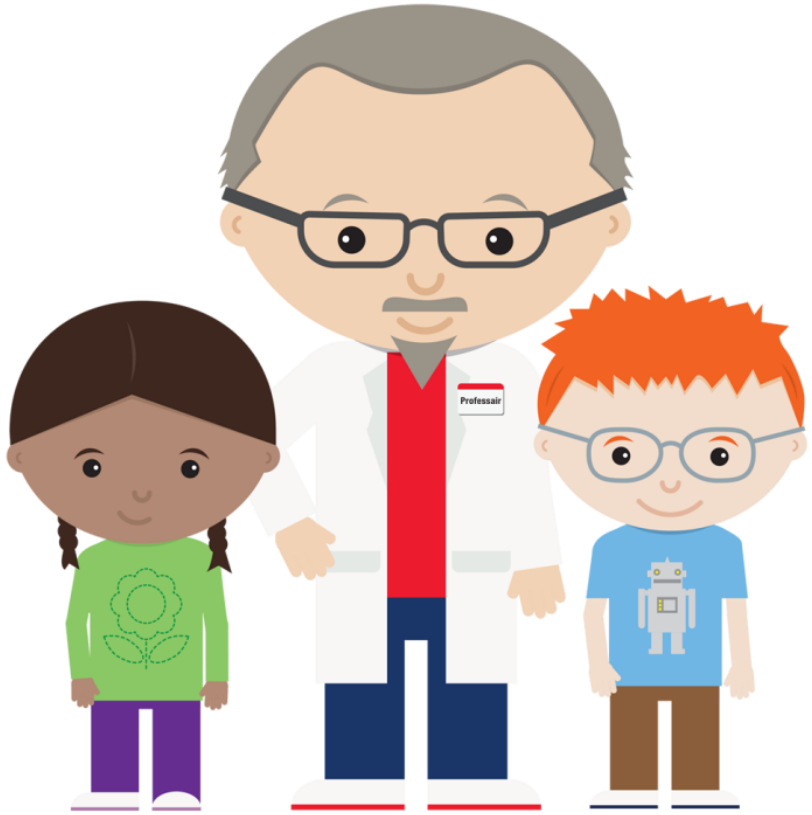
-3rd party distribution centres

i.e During Radon Action Month in November 2017

– sold 800 kits!

Acknowledgements

- Kelly Meyer, Jill Hubick and IT group at The Lung Association, Saskatchewan
- Keith Hanson, Sunridge
- Vicky Snook, Jeff Zimmer and the Radiochemistry group at SRC Environmental Analytical lab
- TAOR SK coalition members
- CARST – Pam!
- Industry Sponsors



Thank you, from Saskatchewan

Jeff Zimmer

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May

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