



# RADON

Take steps towards a healthier life:  
 Test for radon in indoor places

Homes  
 Workplaces  
 Businesses  
 Schools  
 Gathering Places &  
 Gyms

**ALL INDOOR ENVIRONMENTS**



## HOW DO I LOWER MY CANCER RISK?

**01 Lower radon levels**  
 Remember to test to know your radon level. The World Health Organization recommends buildings with radon levels above 100 Bq/m<sup>3</sup> receive action to lower these levels. See Temporary and Permanent Fixes described in "How Do I Lower Radon Levels?" (next page).

**02 Lower exposure to radon**  
 It is best to permanently lower radon levels to as low as reasonably achievable. If this cannot be achieved limit time spent in areas with higher radon levels. For example, consider limiting basement space to occasional use (e.g. storage) and have main bedrooms on above-ground levels. Generally, basements have higher levels of radon because walls and floors are touching the soil.

**03 Lower exposure to tobacco smoke**  
 Health Canada estimates one in three smokers exposed to high radon levels will develop lung cancer.

Reducing smoking and your exposure to second-hand smoke will reduce your risk of lung cancer. This is especially important if you are unable to adequately reduce the amount of radon that you are exposed to.

Visit Interior Health's website for more information on tobacco and help to quit smoking.

<https://www.interiorhealth.ca/YourHealth/HealthyLiving/TobaccoReduction/Pages/default.aspx>

## WHAT IS RADON?

- Radon is a radioactive gas that you cannot see, taste, or smell.
- Soil, rocks, and groundwater emit radon.

## IS RADON HARMFUL?

- Radon is the leading cause of lung cancer in non-smokers and for smokers the second leading cause.
- Your goal is to lower radon levels to as low as reasonably achievable.

## HOW DOES RADON GET INDOORS?

Radon comes from the ground; all buildings will contain radon and some to high levels with potential health risks.\* The only way to know your radon level is to test.

Radon takes the easiest path into buildings through dirt and concrete floors and foundation seams. Heating and ventilation systems influence radon levels too. During the cooler months windows and doors are often closed and rising warm air enables radon to escape from the ground indoors.

Radon levels vary significantly from building to building. Interior BC has "hot spot" areas where nearly 60% of the homes test above the Canadian Guideline of 200 Bq/m<sup>3</sup>.


\*High radon potential areas are known locations where evidence shows the area to be prone to levels exceeding the Canadian Guideline of 200 Bq/m<sup>3</sup>. Check the map to find high radon areas:  
[http://www.radonaware.ca/database/files/library/British\\_Columbia\\_Radon\\_Potential\\_Map.pdf](http://www.radonaware.ca/database/files/library/British_Columbia_Radon_Potential_Map.pdf)


# WHAT CAN I DO?

## 1 Buy a Radon Detector

Testing for radon is easy and inexpensive. Testing is the only way to know your radon level.

Kits are available for purchase through the BC Lung Association, and at some hardware stores. Long term kits are recommended.

 <http://www.radonaware.ca/radon-resources/order-a-radon-test-kit>

 1-800-665-LUNG (5864)

## 2 Measure your Radon Level

The best time to test is during the COLD months.

Set up your long term radon detector in the lowest level (e.g. basement) for at least 91 days. After 91 days, send the detector to the laboratory for analysis according to your kit's instructions.

Re-test radon levels:

- After renovations,
- After making your building more energy efficient,
- After making mechanical changes to your HVAC\* or HRV\*\* systems, potentially changing your building's ventilation or air pressure, or
- To know if your fixes worked.

## 3 Lower your Radon Level

See Temporary and Permanent Fixes in "How Can I Lower Radon Levels?" section.

# HOW CAN I LOWER RADON LEVELS?

## Temporary Fixes:

- Open windows to increase air flow and to allow radon gas to escape to the outdoor air.

Limit time spent in areas with high radon (generally basements), until permanent fixes can be taken.

## Permanent Fixes:

- Increase ventilation.
- Adjust your HVAC\* and/or HRV\*\* systems to pressurize the indoor environment.
- Seal
  - Basement or crawlspace floors,
  - Cracks, joints, and openings in foundation walls and floors, and around pipes and drains, and
  - Openings in the floor slab.
- Keep drain traps primed - filled with water.

**TIP:** Once primed, pour a skim of vegetable oil in the trap to reduce evaporation.

- ✓ Installing an **active soil depressurization** system is the best and most permanent method for reducing radon. It provides an alternate path for the radon to travel into a pipe and outside, rather than into the building.

**Remember to re-test to know if your fixes worked.**

**Certified Radon Professionals can assist you to test and lower your radon levels.**

# FOR MORE INFO:

## Interior Health

<https://www.interiorhealth.ca/YourEnvironment/RadonGas/Pages/default.aspx>

Visit our website to find links to other resources including:

- **BC Lung Association** - RadonAware
- **Find a Professional** - The Canadian National Radon Proficiency Program
- **Health Canada**
- **Mike Holmes on Radon** (video)
- **Take Action on Radon**

Contact the Healthy  
Community Development  
Team today!  
[hbe@interiorhealth.ca](mailto:hbe@interiorhealth.ca)



**Interior Health**  
Every person matters