

# RADON IN YOUR NEW HOME



Test your home for radon today

## RADON FAQs

### Q: What is radon?

A: Radon is a radioactive gas that you cannot see, taste, or smell.

### Q: Where is radon found?

A: Radon comes from the ground; all buildings will contain radon and some to high levels with potential health risks. Interior BC has "hot spot" areas where nearly 60% of the homes test above the Canadian Guideline of 200 Bq/m<sup>3</sup>.

### Q: Is radon harmful?

A: 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.

### Q: How do I lower my cancer risk?

A: Lower radon levels in your home, lower your time exposed to radon, and lower your exposure to tobacco smoke.

### Q: How does radon get indoors?

A: 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.

### Q: How do I know my radon level?

A: The only way to know your radon level is to test. Test after construction is completed and the building reaches occupancy status.

### Q: How do I test for radon?

A: Testing for radon is easy and inexpensive. Testing is the only way to know your radon levels. Kits are available for purchase through the BC Lung Association, and at some hardware stores. Long term kits are recommended.

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 a laboratory for analysis according to your kit's instructions.

### Q: How do you lower radon levels?

A: 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.

Temporary fixes to reduce radon levels include opening windows.

Permanent fixes include installing an active soil depressurization system, sealing cracks, joints, and openings in foundation floors and walls and around pipes and drains, keeping drain traps primed, increasing ventilation, and adjusting HVAC\* and/or HRV\*\* systems.

Limit time spent indoors with high radon (generally basements) until permanent fixes are taken.

Certified Radon Professionals can assist you!

### Q: What does the BC Building Code require?

A: All new builds in high potential areas\*\*\* are required to have a rough-in radon vent pipe. Essentially, the Interior of BC is considered high radon. A rough-in radon vent pipe provides the piping infrastructure for a future active soil depressurization system, if your house tests high. **You must still test when you have rough-in piping, as the only way to know your radon level is to test.**

\*HVAC: Heating Ventilation Air Conditioning

\*\*HRV: Heat Recovery Ventilation

\*\*\*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)



## HOME BUILDER'S RESPONSIBILITY

During construction, the BC Building Code requires all new builds in high potential areas\*\*\* to be built with:

- Effective air barrier system
- Appropriate rough-in piping
- Piping extension to outside air

The purpose of a rough-in radon vent pipe is to allow the home owner a more cost effective and easier option (i.e. installation of a fan to draw radon from below the slab) to lower radon levels if determined through post-construction testing that further action is warranted.

## TO PURCHASE A KIT:

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)

Set up your radon detector in the lowest lived in 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..

## FOR MORE INFORMATION:

### 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

Take Action on Radon

Mike Holmes on Radon (video)

## HOME OWNER'S RESPONSIBILITY

Home owners should **test their home for radon** after construction.

If your home has high radon levels, **the best way to lower radon levels is to connect a fan to the rough-in piping.**

Fan installation turns the rough-in piping into an active soil depressurization system.

Additional ways to reduce radon levels include sealing cracks, joints, and openings in foundation floors and walls and around pipes and drains, keeping drain traps primed, increasing ventilation, and adjusting HVAC\* and/or HRV\*\* systems. All houses, even those testing below the Canadian Guideline of 200 Bq/m3 can benefit from these simple actions.

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

It is recommended to reduce radon levels to as low as reasonably achievable. The World Health Organization recommends buildings with radon levels above 100 Bq/m3 receive action to lower the levels. Most homes can be reduced to levels well below 100 Bq/m3.

Remember to **re-test for radon:**

- 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.

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

\*HVAC: Heating Ventilation Air Conditioning

\*\*HRV: Heat Recovery Ventilation

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