



**Vaudreuil
— Dorion**



**RADON DETECTOR
DISTRIBUTION - 2024**

Order of presentation:

1. What is radon?
2. Radon Guidelines
3. Magnitude of the situation
4. Grant for the purchase of a radon detector
5. Steps – Radon detector steps
6. Radon mitigation measures





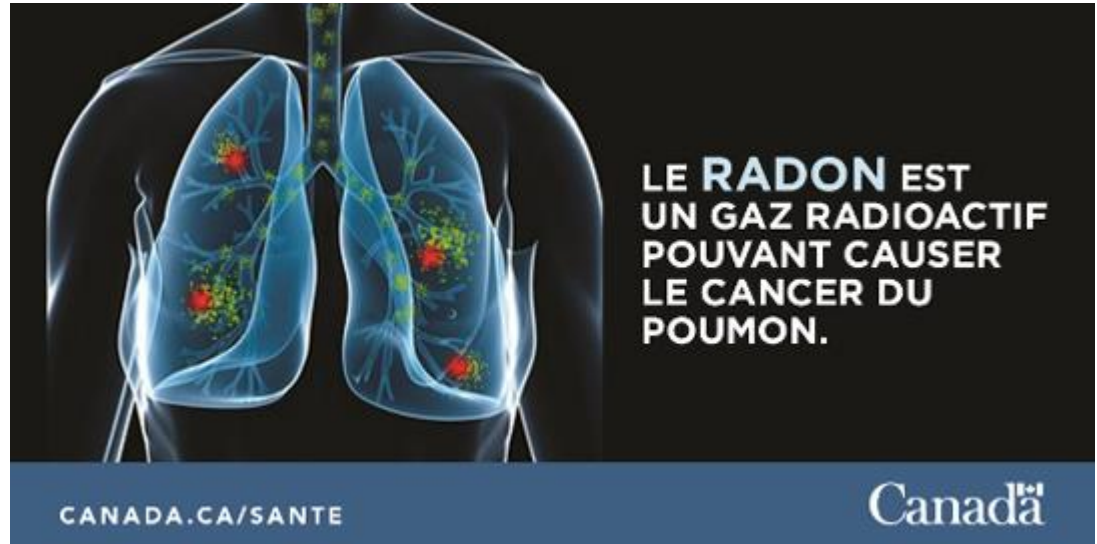
Description:

- Radioactive gas from the breakdown of uranium;
- Naturally found in the soil, rocks and water;
- Colourless, odourless and tasteless gas;
- Blen with ambient gas in the atmosphere.



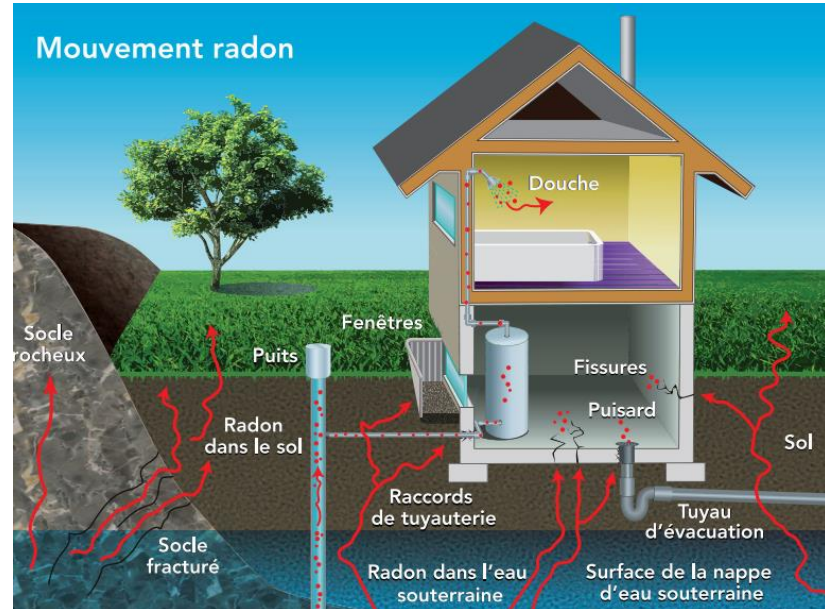
Problematic

- Second leading cause of lung cancer in Quebec;
- 1st cause of lung cancer among non-smokers;
- In Canada, 16% of lung cancer deaths are due to exposure to radon.



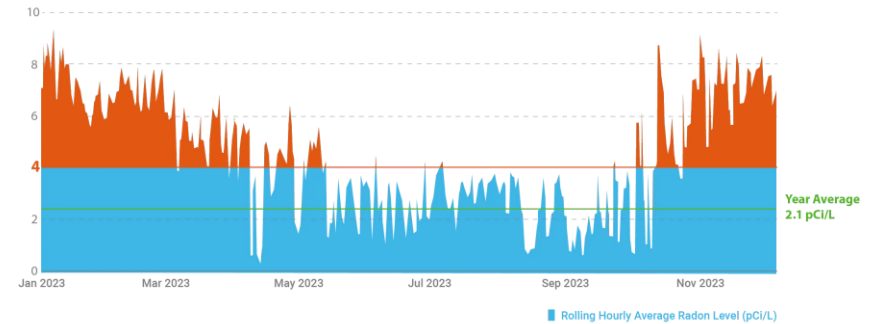
Problematic

- Health risk when concentrated in certain rooms of the house;
- Second leading cause of lung cancer in Quebec;
 - Atmospheric conditions;
 - Soil characteristics;
 - Ventilation;
 - Condition of the foundations.



(Association Canadienne de l'Immeuble)

Radon fluctuation over the seasons



(Ecosense, 2024)

Health Canada recommendations regarding corrective measures for radon concentration

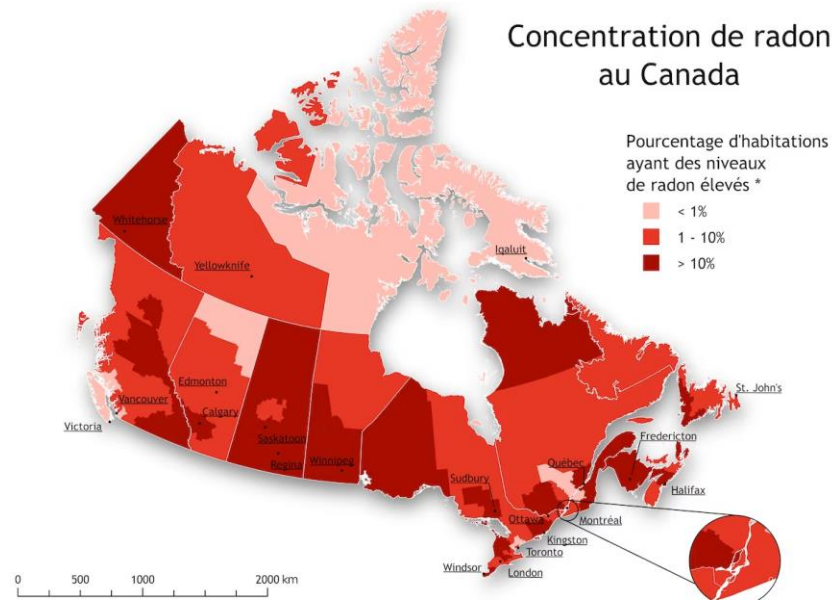
- 1. Adoption of corrective measures within two years:** Health Canada recommends the adoption of measures aimed at reducing the concentration of radon within two years if the results of the radon measurements are between 200 and 600 Bq/m³.
- 2. Adoption of corrective measures within one year:** Health Canada recommends the adoption of measures aimed at reducing the concentration of radon within one year if the results of the radon measurements are higher than 600 Bq/m³.



There is no concentration considered without risk. It is up to each owner to assess the accepted exposure.

Magnitude of the situation:

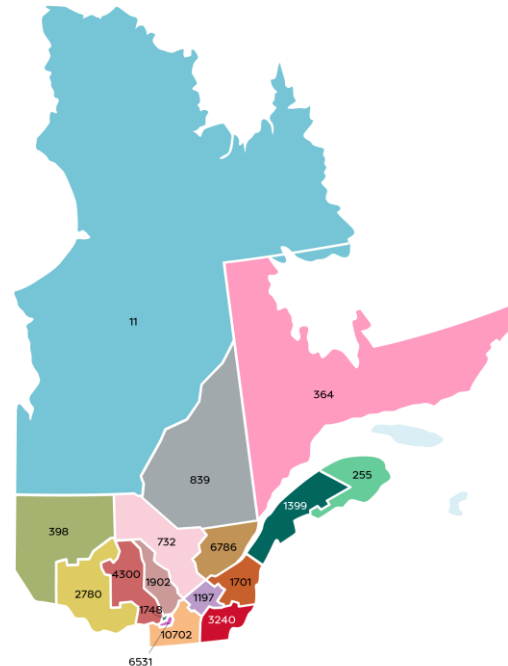
- No radon-free region in Canada
- 7% of Canadians live in a residence where the radon concentration is above the guideline of 200 Bq/m³ (Santé Canada, 2011)



(Santé Canada)

Magnitude of the situation:

Région	nombre de tests	nombre de résultats ≥ 200 Bq/m ³	% résultat ≥ 200 Bq/m ³
Abitibi-Témiscamingue	398	15	3,77 %
Bas-Saint-Laurent	1399	472	33,74 %
Capital - Nationale	6786	1319	19,44 %
Centre-du-Québec	1197	114	9,52 %
Chaudière-Appalache	1701	324	19,05 %
Côte-Nord	364	25	6,87 %
Estrie	3240	798	24,63 %
Gaspésie-Îles-de-la-Madeleine	255	125	49,02 %
Lanaudière	1902	187	9,83 %
Laurentides	4300	733	17,05 %
Laval	1748	369	21,11 %
Mauricie	732	14	1,91 %
Montréal	6531	788	12,07 %
Nord-du-Québec	11	1	9,09 %
Outaouais	2780	593	21,33 %
Saguenay-Lac-Saint-Jean	839	79	9,42 %



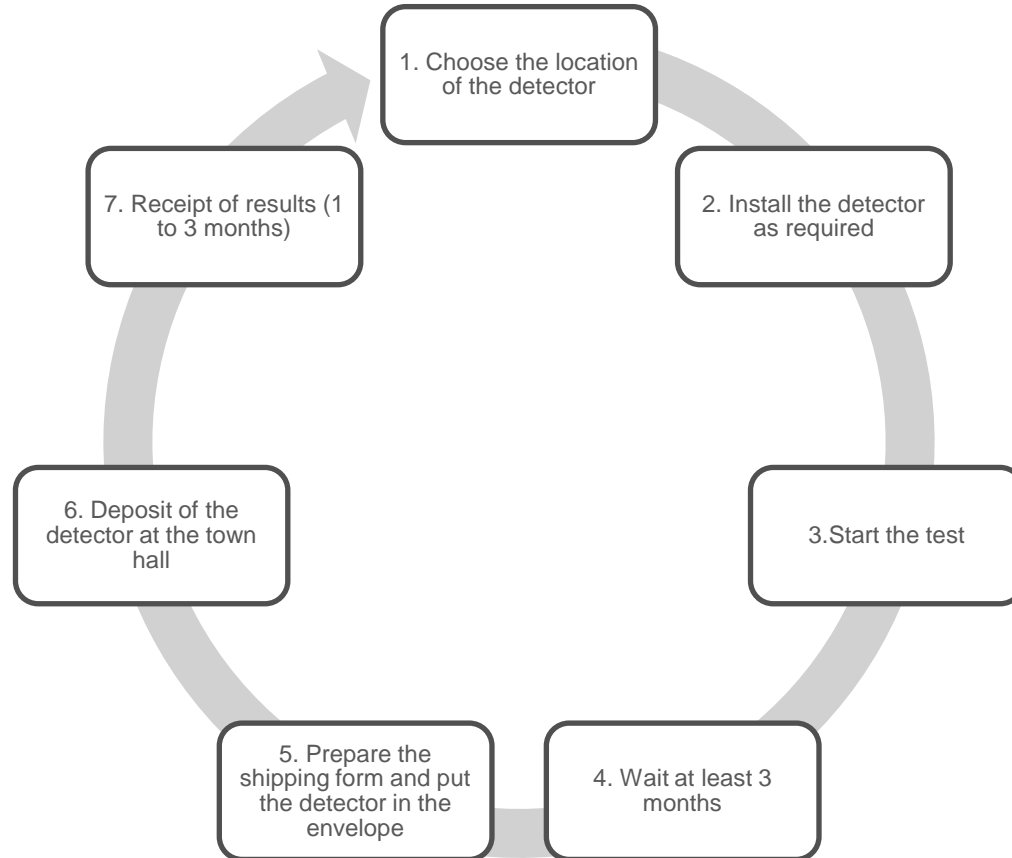
18% of Quebec homes exceed Health Canada's directive

You will receive:

- A radon information leaflet;
- An information sheet for the analytical laboratory;
- A plastic bag;
- An envelope for individual mailing;
- A radon detector for a long-term measurement test.

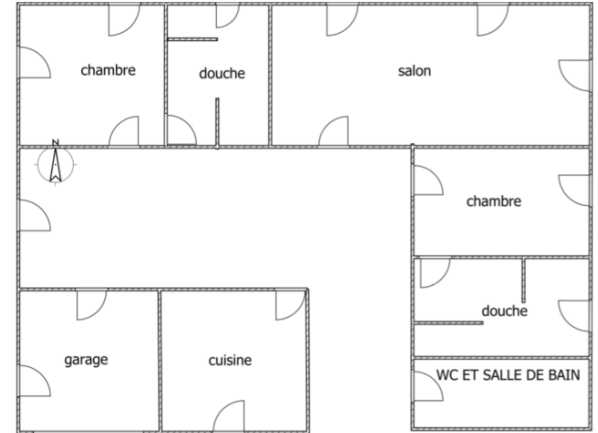


Steps for radon detection



5.2 Choose the location of the detector

- The detector is used to detect the level of exposure of the occupants of the house;
- Must be located in a normally occupied area (at least 4 hours) on the lowest level of the house;
- EX: Bedroom, playroom, office

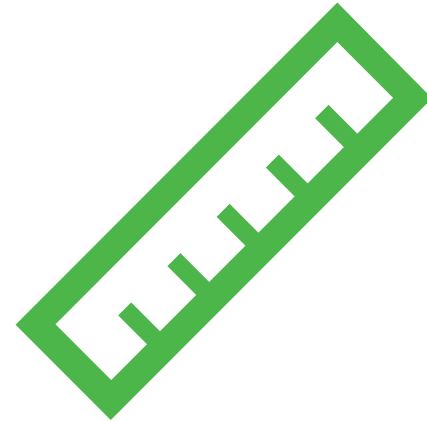


Placing the detector

- 40 cm from an interior wall or 50 cm from an exterior wall;
- Between 0.8 m and 2 m from the floor, but at least 50 cm from the ceiling and 20 cm from any other object;
- At least 1.5 m from any draft;

Éviter de placer le détecteur près :

- Drafts (doors and windows),
- Heat sources (radiator, heater, etc.);
- Electronic appliances;
- Enclosed area (closet, etc.).



Start the test:

- The test begins as soon as it is removed from its packaging;
- Complete the laboratory information form (paper form or online);
- Don't forget to write down your detector number for easier tracking.

Do not remove the sticker



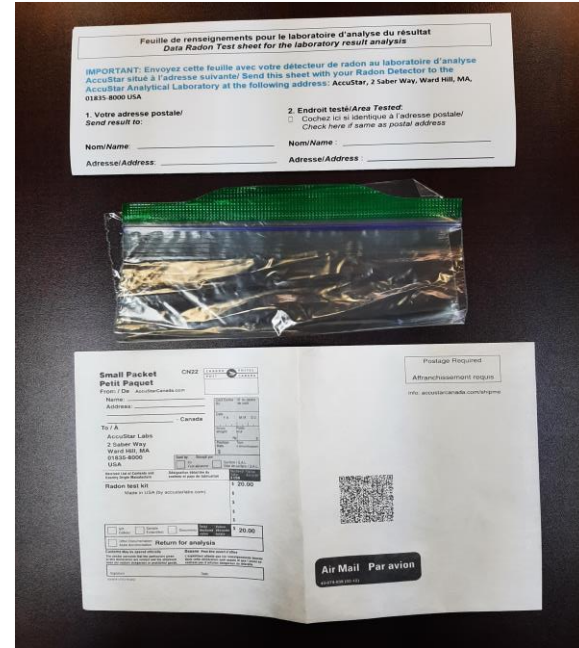
- The ideal period is between November and April (Heating period → less air circulation);
- The detector must remain in the same place for the entire duration of the test;
- The detector must be installed for a minimum of 3 months and a maximum of 12 months. (April, 8 to 18)



Schedule a reminder on your calendar to indicate the end date of your test

5.6 Prepare the submission form

- Complete the information sheet for the laboratory;
- Put the detector in the zipper bag;
- Seal the envelope for mailing;
- Enter your address and the requested contact information.



The City of Vaudreuil-Dorion offers a group mailing service(

Submission between April 8 and April 18, 2024

In the envelope provided for this purpose, submit:

- The detector
- The information sheet for the laboratory



Schedule a reminder on your calendar
for the deposit

- You will receive the results 1 to 3 months after the mailing;
- They will be emailed, from the US lab;
- If you do not receive your results after 3 months, you can collect them yourself via the address available in the bottom section of the form.



What to do according to the results?

Less than 200 Bq/m³

The risk is weak. It is up to the owner to determine whether or not they adopt mitigation measures.

Between 200 and 600 Bq/m³

It is recommended that mitigation measures be adopted within two years.

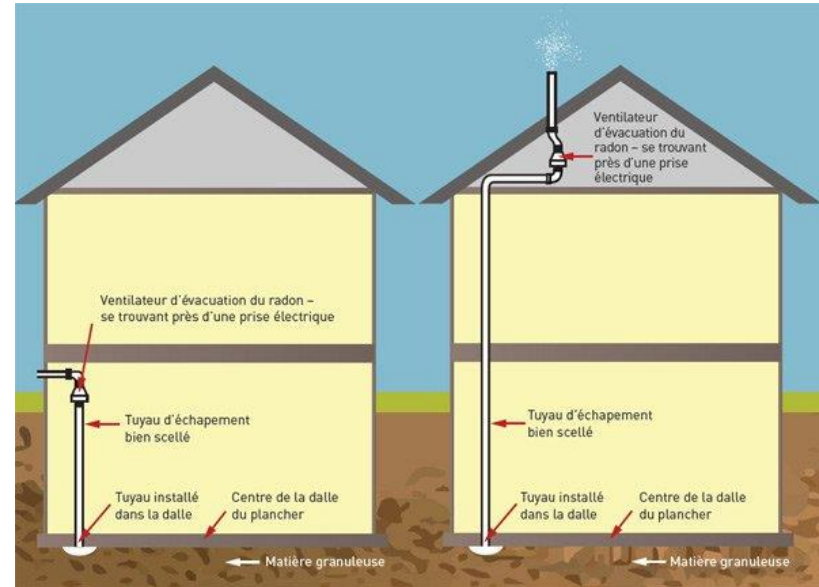
More than 600 Bq/m³

It is recommended that mitigation measures be adopted within one year.

How to reduce radon concentration:

- Blocking potential radon entry points;
- Improved home ventilation;
- Active depressurization under slab.

Fees between \$500 and \$4,000



Do business with a PNCR-C certified contractor to lower radon concentrations.

Grant for the installation of a radon concentration mitigation system

- Reimbursement of 50% of installation costs for such a system, up to \$500 per residence when the results obtained exceed the Canadian action level of 200 Bq/m³.
- Visit the City's website for more details.



Questions?

Environnement

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