Radon in our Homes:
What Realtors Should Know

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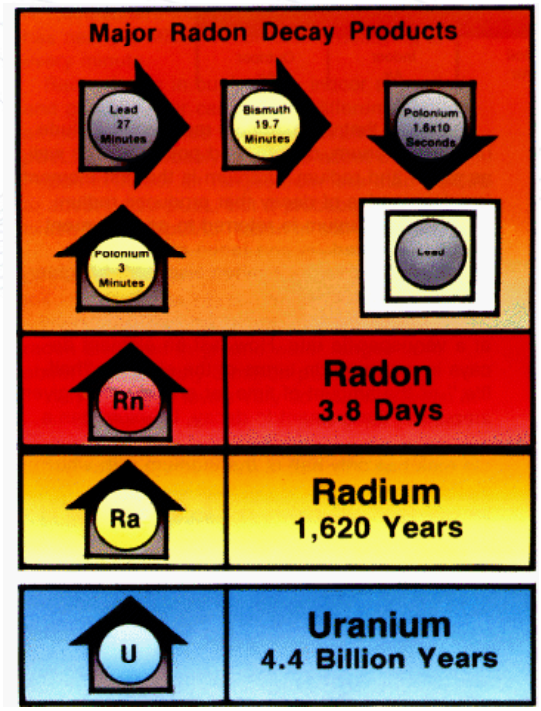
What is Radon?

- An inert gas not detected by human senses
- Naturally occurring
- Radioactive (decays spontaneously from Uranium to Radium to Radon)
- Majority of health risk attributed to radon decay products
- Leading cause of lung cancer in non-smokers
- Second leading cause of lung cancer in smokers



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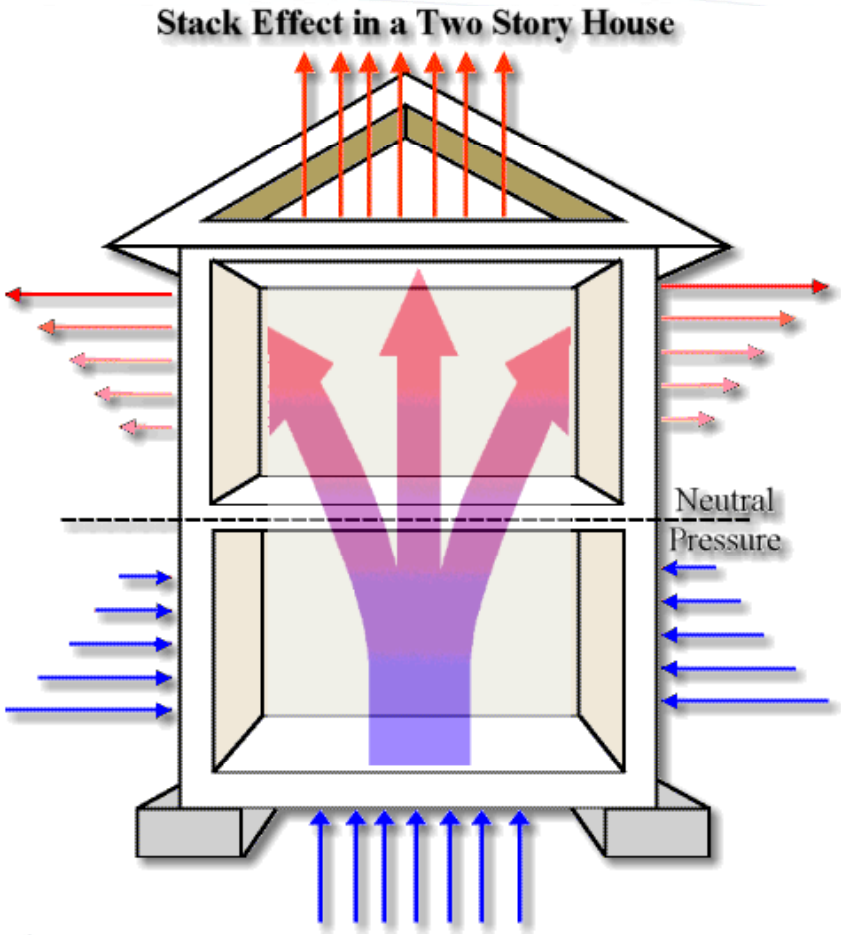
What is Radon? (continued…)



- Average annual outdoor concentration = approx. 10 Bq/m^3 (CMHC, 2007)
- Average annual indoor concentration in homes = approx. 45 Bq/m^3 (CMHC, 2007) – In NS, average outdoor concentration = approx. 107 Bq/m^3 (NRC, 2007)
- Indoor concentrations typically at their highest during the winter heating season due to the Stack Effect
- At Health Canada's action level of 200 Bq/m^3, 347 lives can be saved each year (Cornett, 2007)

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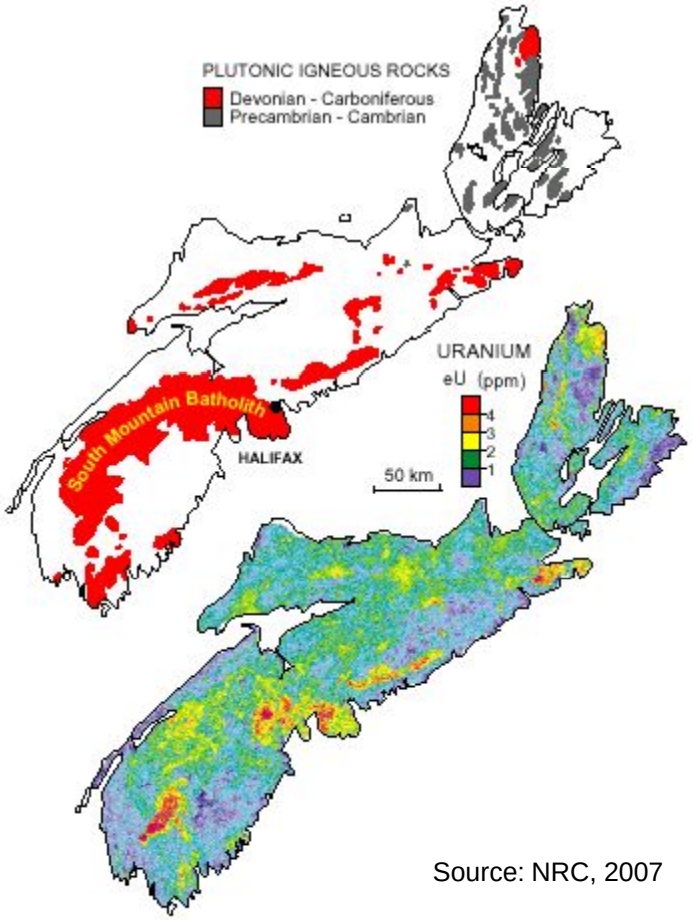
Why test for Radon?



Source: NRC, 2007

- Although Radon concentrations are attributed to the decay of Uranium, bedrock geology alone can not predict indoor air Radon concentrations
- Other contributing factors include building design, seasonal variations, occupant lifestyle
- They only way to know is to test

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Who Can Complete the Testing?

- Residential Radon Measurement Providers are listed on the NEHA-NRPP website: http://www.neha-nrpp.org/Canada_Measurement.html

- NRPP certified Measurement and Mitigation Providers are internationally certified and follow professional standards of practice

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Radon Measurements During Real Estate Transactions

- Long term test (90-365 days) are recommended, however, during real estate transactions, short term tests (2-90 days) may be required

- Three options are available for short term tests during real estate transactions:
  - Two tests simultaneously
  - Two tests consecutively
  - One test using a real-time monitor

- Short term tests must be completed under closed building conditions and should be followed up with a long term test

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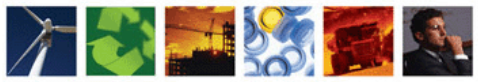

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Radon Mitigation

- If test results indicate concentrations greater than Health Canada's action level of 200 Bq/m^3, then mitigation is required
- Most common residential Radon mitigation technique is Active Soil Depressurization (ASD)
- Contact a certified Residential Radon Mitigation Provider http://www.neha-nrpp.org/Canada_Mitigation.html

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Resources

- Guide for Radon Measurements in Residential Dwellings (Homes), Health Canada
- Guide for Radon Measurement in Public Buildings (Schools, Hospitals, Care Facilities, Detention Centers), Health Canada
- Radon: A Guide for Canadian Homeowners, CMHC and Health Canada
- A Citizen's Guide to Radon – The Guide to Protecting Yourself and Your Family from Radon, US EPA
- Indoor Radon and Radon Decay Product Measurement Device Protocols, US EPA
- Protocols for Radon and Radon Decay Product Measurement Devices, US EPA
- Radon Mitigation Standards, US EPA

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