

# Radon – the six most frequently asked questions

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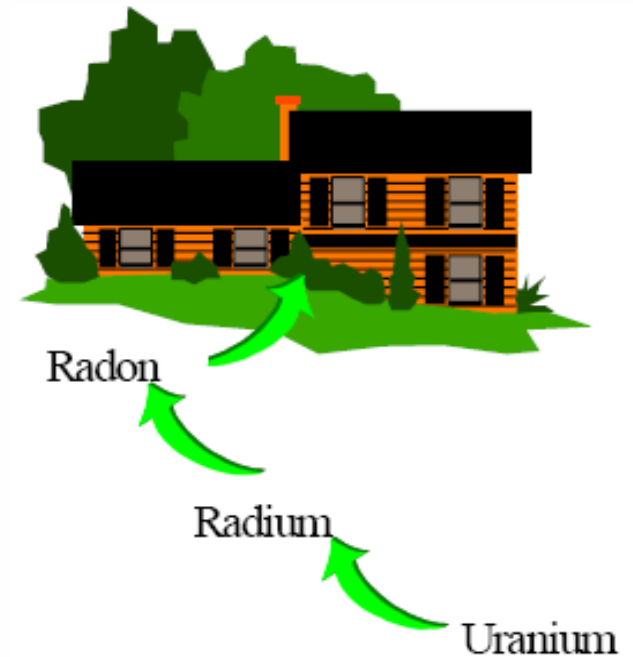


# Radon in the Home

- More and more, informed buyers are having radon tests performed when considering the purchase of a home.
  - Finding elevated concentrations of radon doesn't mean you should walk away from your dream home!
  - Radon reduction technology has improved so much over the last few years that reducing radon is easy and affordable.
- *If you like a home, buy it - radon can be reduced!*

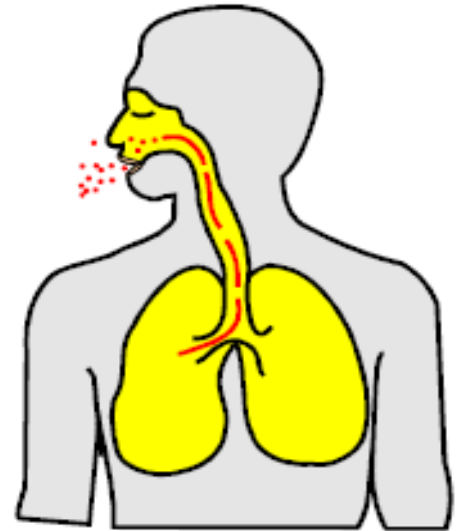
# Q1 – What is Radon?

- Radon is an invisible, radioactive gas created from *natural* deposits of uranium and radium in the soil. Radon gas can be drawn into a building and accumulate to concentrations that can increase the potential for contracting lung cancer.
- Although there are rare cases where the source of the radon has come from building materials created from spent-uranium processing plants, the major source of radon in Colorado homes comes from the natural deposits of uranium commonly found in Colorado from *natural* geology.






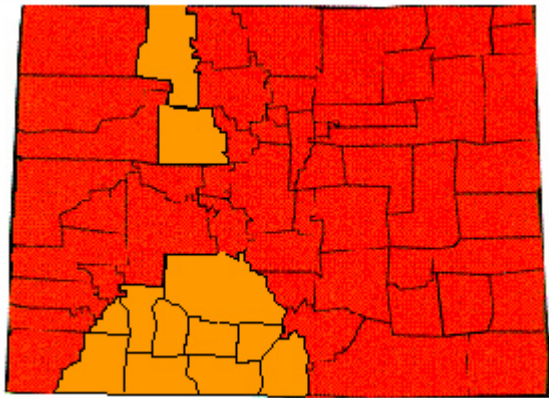
## Q2 – Why should I be concerned?

- Radon is regarded as a Group A carcinogen; it is known to cause cancer in humans with prolonged exposure. Many buyers are concerned about their health risk, as well as property resale value and want to test for and correct radon concerns.
- The United States Environmental Protection Agency and Surgeon General recommend that people not have long-term exposures in excess of 4.0 pico Curies per liter (pCi/L).
- The only means to determine the exposure levels in a home is to measure for Radon.



# Q3 – How common is Radon in Colorado

Color Key	Zone	Range of radon measurements (short-term, closed building)
	1	Greater than 4 pCi/L
	2	Between 2 and 4 pCi/L
	3	Less than 2 pCi/L



- Surveys conducted by the Colorado Department of Public Health and Environment indicate that four out of 10 Colorado homes have the potential for having radon concentrations in excess of the EPA guideline of 4.0 pCi/L.
- That's why the number of people testing their homes, schools, and office buildings is continually increasing.

# Q4 – How is the test performed?

## The test purpose will dictate test conditions

### Radon Potential:

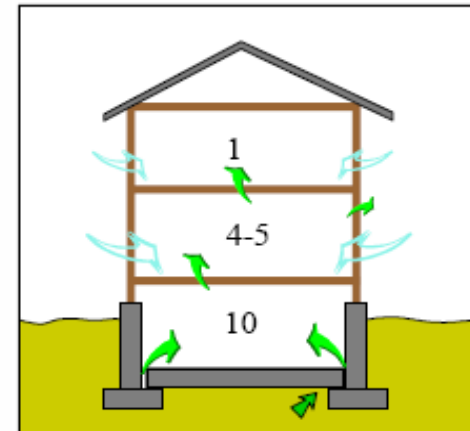
- Short term test
- Typically 2-5 days
- Closed building conditions 12 hours prior to and all during test
- Device deployed on lowest occupiable level of home
- Commonly used at time of resale

### Occupant Exposure:

- Long term test
- Typically 91 days - one year
- Normal lived-in conditions without special closed building conditions
- Device deployed on lowest occupied level of home
- Commonly used outside of a real estate transaction, or used as basis of escrow fund release

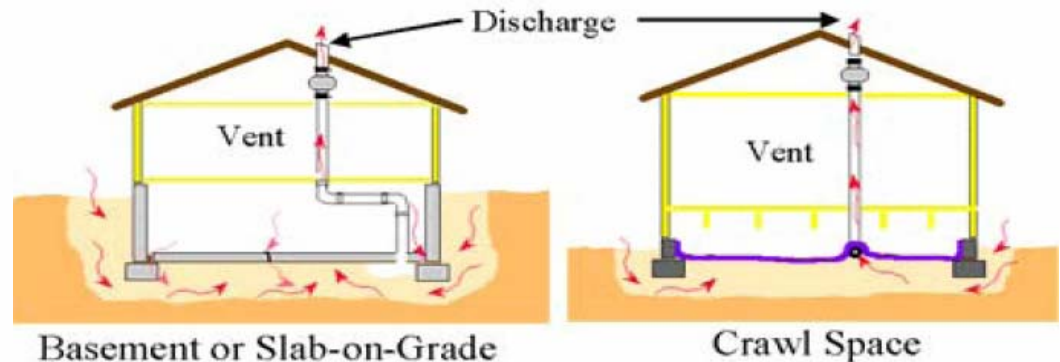
# Q5 – How do I interpret the results?

- If a short-term radon test is conducted in the lowest portion of a home that could be occupied, while all exterior doors and windows are closed for a minimum of two days, one can reasonably say:
  - If the result is less than 4.0 pCi/L, the annual average of the home under normal lived-in conditions is also likely to be less than 4.0 pCi/L.
    - Mitigation or further action is not required at this time, but periodic retesting should be done.
  - If the level is at or above 4.0 pCi/L the house has the potential for being above 4.0 pCi/L and you should consider follow-up testing or taking action to reduce (mitigate) the radon in the home.
    - Mitigation should be pursued at this time, or as an alternative, a long-term test (>90 days) can be performed to provide a more accurate measure of radon levels based upon more typical lived-in conditions.



# Q6 – How do I reduce radon?

- Considerable research has been conducted by governmental agencies and private industry within the state of Colorado and forms a very strong foundation for properly mitigating radon in homes. The techniques are straightforward, reliable and typically can be done in one day by a qualified contractor.
- Radon is mitigated by installing a system that withdraws the radon-laden soil gas from beneath the foundation and exhausts it outside of the building, far enough away from windows and other openings that it will not reenter.
- A reduction system typically consists of a plastic pipe connected to the soil either through a hole in the slab, via a sump lid connection, or access beneath a plastic sheet in a crawl space.
- Attached to the pipe is a quiet, continuously operating fan that discharges the radon outdoors





# Resources

- Colorado Dept of Public Health
  - “Dealing with Radon in Real Estate Transactions”
  - <http://www.cdphe.state.co.us/hm/rad/radon/realestatetransactions.pdf>
- Environmental Protection Agency
  - <http://www.epa.gov/radon>
- Scott Home Inspection
  - We are a NEHA-NRPP Certified Radon Residential Measurement Provider (ID-103812RT)
  - <http://www.scotthomeinspection.com/>
  - 970-532-2424 or 720-979-4960