

What is Radon?

- Radon-222 is a radioactive gas released during the natural decay of thorium and uranium, which are common, naturally occurring elements found in varying amounts in rock and soil. Odorless, invisible, and tasteless, radon cannot be detected with the human senses.¹
- Radon-222 decays into radioactive elements, two of which — polonium-218 and polonium-214— emit alpha particles, which damage lung tissue. These alpha-emitting radon decay products are known to cause lung cancer in humans.¹

Why Act?

- Radon is the second leading cause of lung cancer.¹
- If exposed to 4 pCi/L of radon over a lifetime, 7 per 1,000 of those who never smoked would develop lung cancer versus 62 per 1,000 smokers.²
- 1 in 5 homes in Kentucky have an indoor radon level equal to or greater than 4 pCi/L, which is designated as the “action level” by the EPA.²

The amount of radon in the air is measured in 'picocuries per liter of air' or 'pCi/L'. The EPA recommends to take action to reduce radon if the level is 4 pCi/L or higher.

Kentucky Radon Map

Average Radon Levels by County



UK College of Nursing

Radon Policy Research Program
751 Rose Street, Lexington, KY
40536-0232
859.323.1396

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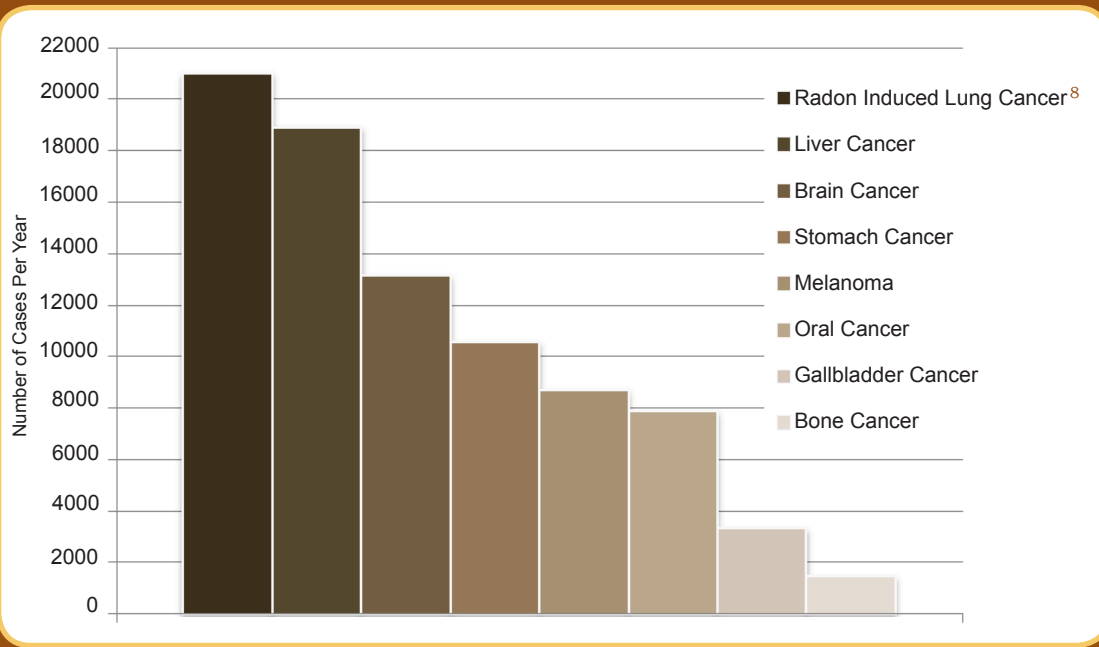
Healthcare Providers & Radon Prevention



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Radon-Induced Cancer Deaths Compared to Other Cancer Deaths⁷



Why is Radon a Health Risk?

- Kentucky is classified by the Environmental Protection Agency as a Zone 1 state. The risk for radon exposure is significantly higher in Zone 1 states.³
- Exposure to radon is associated with an estimated 15,400 to 21,800 lung cancer cases in the United States each year.⁴
- It is estimated that 3-14% of U.S. lung cancer cases are linked to radon.¹
- The World Health Organization says that there is sufficient evidence that radon is a cause of lung cancer in the general population.¹
- The Surgeon General issued a public health advisory in 2005 warning that radon is the second leading cause of lung cancer.⁵
- The President's Cancer Panel Report (2009-2010) states that the radioactive decay produced by radon can damage DNA which can lead to lung cancer.⁶

1. Zeeb H, Shannoun F, eds. WHO handbook on indoor radon: A public health perspective. Geneva, Switzerland: World Health Organization; 2009.

2. U.S. Environmental Protection Agency (EPA). A citizen's guide to radon: A guide to protecting yourself and your family from radon. 2004.

3. Environmental Protection Agency. EPA Map of Radon Zones. 1993; <http://www.epa.gov/radon/zonemap.html> Accessed June 26, 2009.

4. Committee on Health Risks of Exposure to Radon (BEIR VI) NRC. Health effects of exposure to radon: BEIR VI. Washington, D.C.: National Research Council; 1999.

5. U.S. Department of Health and Human Services. Surgeon General releases national health advisory on radon. 2005; <http://www.surgeongeneral.gov/pressreleases/sg01132005.html>. Accessed January 23, 2007.

6. Reuben S. Reducing environmental cancer risk: What we can do now. In: The President's Cancer Panel AR-, ed. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2010:1-55.

7. American Cancer Society Inc. Cancer Facts and Figures, 2009. Atlanta: American Cancer Society; 2009.

8. U.S. Environmental Protection Agency. EPA Assessment of Risks from Radon in Homes. In: EPA, ed: Office of Radiation and Indoor Air; 2003.

How Can I Help My Patients?

inform



Share information about radon.

prescribe

Radon. Easy Fix. Smart Decision.

Name: _____ Date: _____

Address: _____

Test your home for radon.

Mitigate your home if radon levels are 4 pCi/L or above.

Hire a certified radon professional.

Encourage neighbors, friends and family to test their homes.

Physician _____ Date _____

LABEL
 REFILL 1 2 3 4 until radon levels are fixed

Write a prescription for home testing.

encourage



Encourage your patients to test for radon and mitigate if above EPA action level. Your local and state health departments offer free test kits.