

What is the Radon Risk in Your Home?

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Seems like long ago, information about radon was in the media and then, nothing. Did it go away? Is it still something we should be concerned about?

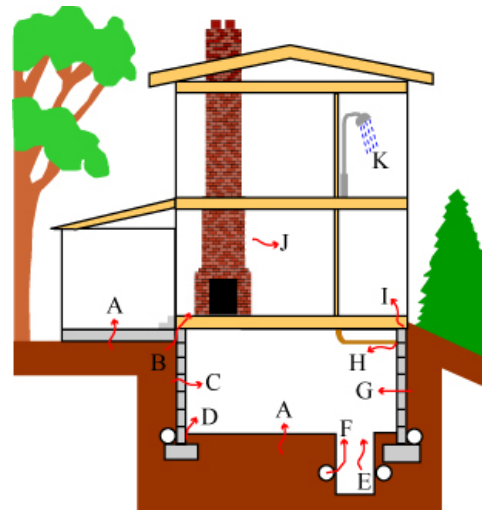
Information on Radon- Radon is a naturally occurring radioactive gas, which is produced by the decay of uranium and radium in the soil. It is odorless, colorless and tasteless. The radiation from this gas can harm cells that make up our body's tissues with the lungs being most vulnerable. Major national and international organizations that have examined the health risks of radon have concluded that radon is a "class A" or known cancer-causing agent. Exposure to radon over an extended period of time can increase your long-term risk *cancer*. Radon is the second leading cause of lung cancer deaths nation-wide. The U.S. Environmental Protection Agency (EPA) has estimated that 21,000 people a year die of lung cancer caused by radon.

What is Our Risk in Minnesota? - A large percentage of Minnesota homes have higher levels of radon in the indoor air because of how homes are built and operate in our climate. Radon can enter your homes from the surrounding soil and accumulate in living areas- especially during the winter months, when homes are sealed and insulated against the cold. An important factor is that Minnesotans have basements that are used as living areas. The Minnesota Department of Health estimates that about *one in three* Minnesota homes have enough radon to pose a large risk to the occupants' health over many years of exposure.

How does it Enter My Home? - Because radon is a gas, it is able to move through spaces in the soil or fill material around a home's foundation. Minnesota homes tend to operate

under a negative pressure and this creates a vacuum. This is especially true in the lowest portions of the home and during the heating season. Because of this vacuum, radon can enter a home through the floor and walls – anywhere there is an opening between the home and the soil. Major entry routes can be through:

- A. Cracks in concrete slabs.
- B. Spaces behind brick veneer walls that rest on uncapped hollow-block foundations.
- C. Pores and cracks in concrete blocks.
- D. Floor-wall joints.
- E. Exposed soil, as in a sump or crawl space.
- F. Weeping (drain) tile, if drained to an open sump.
- G. Mortar joints.
- H. Loose fitting pipe penetrations.
- I. Open tops of block walls.
- J. Building materials, such as brick, concrete, rock.
- K. Well water (not commonly a major source in Minnesota homes).



How Do I Know if I Have a Problem in My Home? - The Minnesota Department of Health (MDH) recommends that **all** Minnesota homeowners (site-built, manufactured homes and apartments 3rd floor or lower) test their homes for radon. There are testing devices available that provide quick test results. However, because radon is primarily a long-term health concern, MDH recommends using a testing device that can take average readings over a longer period of time. The testing device used most often by homeowners is an alpha track detector. Follow the simple directions that come with the test kit, and leave it in place for at least three months and up to a full year if possible. If the radon level in your home does exceed the EPA guideline, the problem can be corrected. In some cases, simply improving ventilation and sealing the cracks and

openings where radon enters the home can lower radon levels. You can contact the MDH for more information on radon. The Indoor Air Unit of the MDH@ 1-800-798-9050, or visit the website: www.health.state.mn.us. To obtain low cost (\$5.95) radon test kits, how to perform them and use the results call Air Check @ 1-800-247-2435 or visit their website @ www.mn.radon.com.

Knowledge is a valuable tool used to build and keep our homes safe.