

What is the Radon Risk in Your Home?

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According to the Minnesota Department of Health, 42% of Minnesota homes have dangerous levels of radon while one in five Anoka County homes has levels over the EPA “action level” of 4pCi/L. This high occurrence is because of how homes are built and operate in our climate. Radon can enter your home 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.

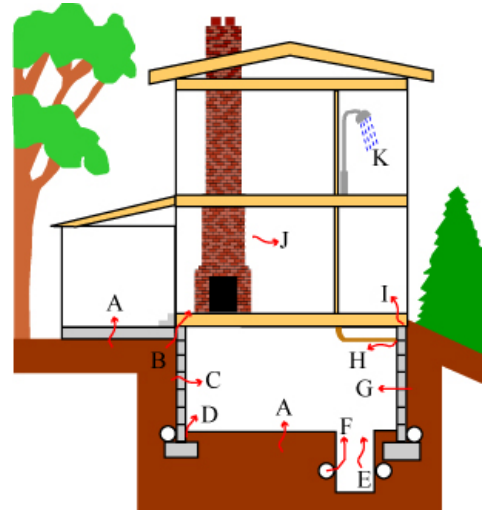
Radon is a naturally occurring radioactive gas, which is produced by the decay of uranium and radium in the soil. It is odorless, colorless and tasteless. The radiation from this gas can harm our body’s cell tissues; the lungs being most vulnerable. Major national and international organizations that 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 of *lung cancer*. Radon is the *first leading cause of lung cancer deaths nation-wide for non-smokers, and second for smokers*. The U.S. Environmental Protection Agency (EPA) has estimated that 21,000 people die each year of radon related lung cancer.

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, which creates a vacuum. This vacuum is strongest in the lowest portions of the home during the

heating season. Because of this, radon can enter a home through cracks and joints in the floor and walls, or anywhere there is a pin-sized 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).



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.

Contact the MDH for more information on radon @ 651-201-4601, or visit the website:

www.health.state.mn.us/radon. To obtain a free radon test kit, sign up for a Home Safety

Survey with the Spring Lake Park-Blaine-Mounds View Fire Department. Call 1-763-767-4003 to schedule a free appointment.

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