

WHAT IS RADON?

Radon is a naturally occurring gas produced by the breakdown of uranium in soil, rock, and water. Radon cannot be detected by sight, smell, or taste and is estimated to cause approximately 21,000 deaths from lung cancer each year. It can become a health risk when trapped indoors where it can build to high levels. Radon can enter a home or building through dirt floors; hollow block walls; cracks in the foundation floor and walls; and openings around floor drains, pipes, and sump pumps.

Radon can enter and collect inside homes and other buildings that are not built with radon-resistant techniques. However, buildings constructed with radon-resistant techniques can ensure lower radon levels, energy-efficiency, and a safer home.

WHERE CAN I GET MORE INFORMATION?

The USEPA publication “**Building Radon Out, A Step-by-Step Guide on How to Build Radon-Resistant Homes**” is a good “how-to” booklet. For copies of this publication please contact the Michigan Department of Environmental Quality Radon Program at 800-RADON GAS (800-723-6642). The guide is also available online at www.epa.gov/radon/pubs.

Radon pointers:

- Homes with radon can be reliably reduced to less than 4 pCi/L.
- Most systems can be installed in one day by a qualified contractor.
- The repairs take 24 hours to take effect before retesting can occur.
- Michigan Department of Environmental Quality maintains lists of certified radon contractors.
- A radon problem can be found in any home, regardless of its age.
- Although more and more builders are installing radon systems, do not assume that a new home has one or that the radon level is low. Test!

Other helpful documents:

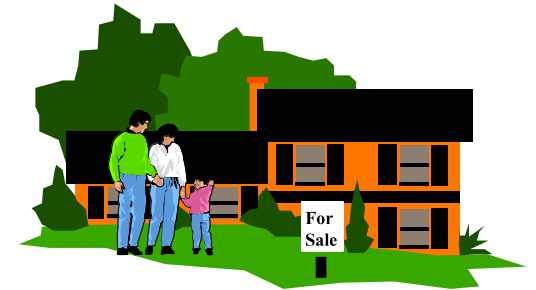
Available from the Michigan Department of Environmental Quality by calling 1-800-RADON GAS / 1-800-723-6642.

- Home Buyers and Sellers Guide
- Consumers Guide to Radon Reduction
- Citizens Guide to Radon
- List of measurement and mitigation professionals (also available at: www.nrpp.info/ or www.nrsb.org)



Michigan Department of
Environmental Quality

DEALING WITH RADON in Real Estate Transactions



More and more informed buyers are having radon tests performed when considering the purchase of a home or office building.

But what if an elevated concentration of radon is found? Does this mean you should walk away from your dream home? No!

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 --
the radon can be reduced!**

Radon - What is it?

Radon is an invisible, radioactive gas created from *natural* deposits of uranium in the soil. Radon gas can be drawn into a building and accumulate to concentrations that can cause a health concern. Finding high levels of radon in the home has nothing to do with the age, quality, or upkeep of the home.

How prevalent is radon in Michigan?

Radon data collected by the Michigan Department of Environmental Quality indicates that about 27% of radon tests conducted in Michigan return results in excess of the U. S. Environmental Protection Agency's action level of 4.0 picoCurie per liter (pCi/L). The only way to tell if a home has elevated levels of radon is to have the home tested. This is easy to do and there are many testing companies and home inspectors who offer radon measurement services. Look for EPA listed individuals.

Don't despair if you find elevated radon concentrations!

Reliable reduction techniques have been developed that will effectively control radon in buildings. Finding a home with a radon system already installed is a plus. Having one installed is affordable, reduces radon, and can enhance future resale value.

If I find a home with a radon problem, should I look for another home?

If you look for another home, especially in the same area, chances are good that it will also have a radon concern, because radon is associated with the rocks and soils. ***Radon can be reduced!*** Just like a water drainage concern can be fixed with a sump, or a leaky roof can be replaced, a radon system can be installed to reduce the radon and at far less cost than these other home repairs. A radon system will actively draw the radon from beneath the home and exhaust it outside.

Of the problems that a house can have, radon is one of the most easy to identify and fix!

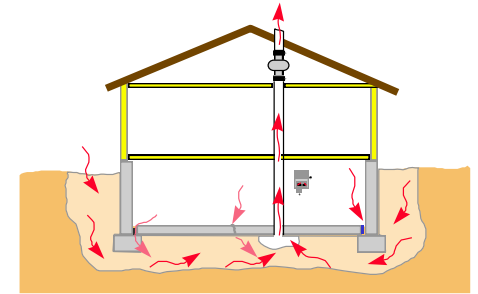
If you are interested in a home that either has an existing radon reduction system, or tests have shown that a radon system may be warranted, rest assured that your dream house will only be improved by a radon system.

In fact, it has been shown that radon mitigation systems have additional benefits beyond reducing radon, such as reducing molds and mildews to which some people are allergic.

***Ask about radon
before you buy
or
before you build!***

How expensive are these systems to install and operate?

A reduction system consists of plastic pipe connected to the soil either through a hole in a slab, via a sump lid connection, or beneath a plastic sheet in a crawl space. Attached to the pipe is a quiet, continuously operating fan that discharges the radon outdoors.



- Average installation cost: \$1,200
- Average operating cost: \$3.00/month.
- Expected life span of fan: 11 years
- Fan replacement cost: \$145-\$300
- Periodic maintenance: none

Won't sealing the floor cracks take care of the problem? NO!

Sealing floor cracks to keep radon out is as difficult as sealing floors and walls to keep water from seeping in. To control radon in an existing home, a collection system is installed to draw radon from the soil (like a sump collects water) and exhaust it to a safe location outside of the home. These radon reduction systems are called Active Soil Depressurization Systems.