

*Any home can have a radon problem—do a check during National Radon Action Month in January.□*

***By Jan Rahn***

***Managing Editor***

Awareness of the danger from radon in the home is being widely publicized by the U.S. Environmental Protection Agency and the Southwest Nebraska Public Health Department which serves Perkins County.

A national campaign during January is underway to educate Americans about the dangers of radon exposure and encourage action to protect homes and families.

Radon is a silent killer—a gaseous, colorless, tasteless, odorless, invisible radioactive element that is extremely toxic.

This natural occurring gas is dispersed in outdoor air, but it can reach harmful levels when trapped in buildings.

According to the SWNPHD, radon is present at elevated levels in over half of the homes in their service area.

More than 20,000 people die annually of lung cancer from radon exposure, estimates the U.S.

Environmental Protection Agency.

Radon is the second leading cause of lung cancer in the U.S. after smoking and the leading cause of lung cancer among non-smokers.

“However,” said Environmental Health Coordinator Shane Smith from SWNPHD, “because you can’t see or smell radon, people tend to downplay the health effects and ignore the possibility that there might be a silent killer in their homes.”

During National Radon Action Month in January, the Southwest Nebraska Public Health Department (SWNPHD) is offering licensed radon testing at 50 percent off to the eight county health districts they serve.

According to Smith, the most accurate testing is 48-hour in-home monitoring to acquire an average sample of radon present.

The testing machine is set up in the lowest lived-in area of the home.

Only a licensed representative through the state can administer the testing in the home.

Radon testing can be done during January at a discounted cost of \$62.50. Smith said the 48-hour test that monitors radon in the home is simple and accurate.

Because radon poses a serious threat to the community’s health, residents of Perkins County are urged by Southwest Nebraska Public Health Department to take action during this year’s National Radon Action Month by testing their homes for radon.

### Where Does It Come From?

Any home may have a radon problem. Radon is the decay product of radium. Both are part of the long decay chain for uranium.

Since uranium is everywhere in the earth's crust, radium and radon are present in almost all rock and all soil and water.

The amount of radon in the soil depends on soil chemistry, which varies from one house to the next. The amount of radon that escapes from the soil to enter the house depends on the weather, soil prosity, soil moisture, and the suction within the house.

### **How Does Radon Get In?**

Radon is a radioactive gas. It comes from the natural decay of uranium that is found in nearly all soils.

It typically moves up through the ground to the air above and into the home through cracks and other holes in the foundation. The home traps radon inside, where it can build up.

Any home may have a radon problem. This means new and old homes, well-sealed and drafty homes, and homes with or without basements.

Radon from soil gas is the main cause of radon problems. Sometimes radon enters the home through well water (see "Radon in Water" below). In a small number of homes, the building materials can give off radon, too. However, building materials rarely cause radon problems by themselves.

### **What are the Health Effects?**

There are no immediate symptoms from exposure to radon.

Radon in indoor air is estimated to cause about 21,000 lung cancer deaths each year in the U.S.

Smokers are at higher risk of developing radon-induced lung cancer. Lung cancer is the only health effect which has been definitively linked with radon exposure.

Lung cancer would usually occur 5-25 years after exposure. There is no evidence that other respiratory diseases, such as asthma, are caused by radon exposure, and there is no evidence that children are at any greater risk of radon induced lung cancer than adults.

### **Information on Testing**

For more information on radon, radon testing and mitigation, and radon-resistant new construction, call SWNPHD at 308-345-4223 or visit the web site at [www.swhealthdept.com](http://www.swhealthdept.com), or visit EPA's National Radon Action Month Web site at [www.epa.gov/radon/nram](http://www.epa.gov/radon/nram).

Southwest Nebraska Public Health Department serves Chase, Dundy, Frontier, Furnas, Hayes, Hitchcock, Perkins and Red Willow counties.