





Iowa Department of Public Health  
Iowa Radon Program

*Promoting, protecting and ensuring the health of Iowans.*

## **What is Radon?**

Radon is a naturally occurring gas that comes from the breakdown of uranium in the soil.

## **How do I become exposed to Radon?**

Radon comes up through the soil and rocks surrounding your home. It can seep through the cracks in concrete walls and floors, floor drains, crawl spaces and hollow-block walls into your home. Radon can also enter your home through your water supply. In Iowa, water is not considered to be a major health threat and pathway for radon into a home.

## **Why haven't I heard of the Radon danger until recently?**

Radon has always existed, but it wasn't until the 1980s that dangerous radon levels were noted inside U.S. homes. Congress has recognized the consequences of radon and passed legislation in October 1988 establishing a national goal that indoor radon levels should not exceed outdoor radon levels.

## **Why should Radon worry me?**

Radon is the second leading cause of lung cancer. Numerous studies are currently being conducted to find out if radon causes other kinds of cancer.

## **What are the symptoms of breathing Radon?**

There are no noticeable symptoms such as a headache or an upset stomach to indicate that radon is present. Symptoms will appear only after lung cancer has developed, which may take several years.

## **How does Radon cause lung cancer?**

Radon decays, forming solid radioactive particles which attach to dust particles. These radon-decay products are what actually damage the lungs. The radioactive particles become lodged in the lungs when inhaled. As the particles decay, they release bursts of energy that can penetrate and damage sensitive lung tissue. The damaged tissue has the potential to develop into lung cancer.

## **What evidence is there that Radon causes lung cancer?**

Extensive studies of thousands of uranium and other underground miners have been carried out for over 50 years in five nations, including the United States. These studies provide convincing evidence that exposure to radon and its decay products are associated with an increase in lung cancer. The U.S. Environmental Protection Agency (EPA) estimates that 14,000 to 21,500 Americans die each year from radon exposure. Radon is responsible for over half of most Iowan's radiation exposure each year. Radon exposure is also considered to be the leading cause of lung cancer in non-smokers.

## **Is there a relationship between smoking and Radon in causing lung cancer?**

Yes. A 1988 report by the National Research Council of the National Academy of Sciences found that smokers exposed to radon increase their risk of lung cancer by 10 or more times in comparison to non-smokers.