One in 5 lung cancers occur in non-smokers. Having victims test their homes may prevent lung cancer in their family and future residents.

WHAT CAN I DO?

Stress to all your patients the importance of conducting a radon test. Ask if they know the radon level in their home on standardized patient history forms. Inexpensive mail order test kits are available from a number of member laboratories found at www.aarst.org.

AARST will provide a free radon test kit to lung cancer victims. While it is obviously too late for these victims, they naturally have concern for their family members. Having their homes tested is important in making a connection to the cause and preventing lung cancer in family members and future residents of the home. AARST has produced an information pamphlet specifically for lung cancer victims containing a coupon for ordering their free test kit.

CANCER SURVIVORS AGAINST RADON (CANSAR)

The idea of supplying free radon tests for lung cancer victims was provided by Dr. Lane Price, a well-known oncologist in Decatur, Alabama. Dr. Price insists that her non-smoking lung cancer patients have their homes tested for indoor radon. She has discovered that an alarming number of patients, most of whom are women, have been living in dangerous levels of radon for years.

After learning their indoor radon levels were elevated, many of the victims expressed frustration that they were never told about the seriousness of radon exposure and how easy it would have been to test and to mitigate.

Some victims want to come forward and urge others to take preventive measures by testing for radon. Cancer Survivors Against Radon (www.CANSAR.org),is a free support organization that allows victim volunteers to speak out on the seriousness of the radon concern. More information about CANSAR is presented in a special pamphlet for lung cancer victims. These brochures can be ordered at www.aarst.org, by calling toll-free to AARST headquarters at 1-866-77AARST or by contacting your state radon program at the telephone number listed below:

WE WILL PLACE YOUR
STATE RADON PROGRAM
INFORMATION & LOGO HERE!

Radon Professionals Saving Lives

A Guide to Radon Awareness for Cancer-Care Professionals

Lung Cancer: It's Not Just From Smoking!

The U.S. EPA and the National Academy of Sciences (NAS) rank radon as the number one cause of lung cancer in non-smokers and estimate 22,000 deaths occur in the U.S. annually as a result of exposure to this Class-A carcinogen. Dr. Richard H. Carmona, the U.S. Surgeon General, issued a 2005 national health advisory on radon.

The mortality rate associated with lung cancer is even more tragic because a significant portion of lung cancer is preventable.

WHERE DOES RADON COME FROM?

Radon is a naturally occurring odorless, tasteless, colorless radioactive gas. It is produced by the natural breakdown of radium in soil, rock and water. Many homes and other buildings, such as schools and offices have high levels of radon. Because it's odorless and invisible and the lung cancer usually shows up over a long period of exposure, the danger of radon is often underestimated.

Because of the stack effect, radon can be drawn into the home from the soil below. Common entry points are cracks in concrete floors, utility access points, spaces around floor drains, sump pits, construction joints and tiny cracks in basement walls. The concentration will depend on the source strength and the rate of pressure driven entry.

HOW DOES RADON INDUCE CANCER?

If inhaled, airborne radon decay products become deeply lodged or trapped in the lungs, where the alphas radiate and penetrate the cells of the mucous membranes, bronchi, and other pulmonary tissues

The ionizing radiation energy affecting the bronchial epithelial cells is believed to initiate the process of the carcinogenesis. Although, radon-related lung cancers are mainly seen in the upper airways, radon increases the incidence of all histological types of lung cancer, including small cell carcinoma, adenocarcinoma, and squamous cell carcinoma.

WHAT IS THE EVIDENCE?

In late 2003, based on the National Academy of Sciences' (NAS) latest report on radon from the Biological Effects of Ionizing Radiation Committee (BEIR VI), the EPA increased their previous risk assessment by over 50% to 22,000 radon-induced lung cancer deaths in the U.S. annually. Radon is the leading cause of lung cancer among non-smokers.

We no longer need to rely solely on extrapolations of data from underground miners to predict the risk for people exposed to residential radon. Two comprehensive studies show definitive evidence of an association between residential radon exposure and lung cancer.

The North American Residential Radon Pooling Study (Epidemiology March 2005) and the European Residential Radon Pooling Study (British Medical Journal January 2005) combined data from twenty previous residential studies to confirm the radon risks predicted by extensive occupational studies of underground miner's who breathed radon for a period of years.

Both residential pooling studies showed an increased lung cancer risk consistent with the predicted 12% per 100 Bq/m3 (2.7 pCi/l)) based on a linear model developed by the National Research Council. According to EPA, these findings effectively end any doubts about the risks to Americans of having radon in their homes and confirm that breathing low levels of radon can lead to lung cancer.

The World Health Organization (WHO) says radon causes up to 15% of lung cancers worldwide. In an effort to reduce the rate of lung cancer around the world, the WHO launched a new international radon project in 2005 to help countries increase awareness, collect data and encourage action to reduce radon-related risks.

CAN HIGH RADON LEVELS BE REDUCED?

A certified or licensed contractor can easily and affordably reduce elevated radon levels. Most techniques prevent radon from entering your home by drawing the radon from below the house and venting it through a pipe to the air above the house where it quickly dilutes.

Mitigation can also decrease moisture and other soil gases entering the home, reducing mold, mildew, methane, pesticide gases and other air quality problems.

It is important for health care practitioners to inquire about and encourage patients to test for radon levels in their homes.