

WHAT IS RADON?

Radon is a naturally occurring radioactive gas identified as the second leading cause of lung cancer. Radon is odorless, invisible and without taste and cannot be detected with the human senses. Radon is naturally occurring outdoors, but often is substantially concentrated indoors because homes are not normally built to be radon resistant.

RADON AND CHILDREN

Children behave differently than adults, leading to a different pattern of exposures to the world around them. For example, children exhibit hand-to-mouth behavior, ingesting whatever substances may be on their hands, toys, household items, and floors. Children play and live in a different space than do adults. For example, very young children spend hours close to the ground where there may be more exposure to toxicants in dust, soil, and carpets as well as low-lying vapors such as radon, mercury vapor or pesticides.

WHY TEST FOR RADON?

Because of the serious health risk posed by radon, EPA recommends that all homes, home day care centers and commercial day care facilities are tested for radon. Day care environments should take steps to lower indoor radon levels when levels are at or above EPA's radon action level of 4 pCi/L and consider lowering radon levels when found to be between 2 and 4 pCi/L.

WHAT HEALTH EFFECTS ARE ASSOCIATED WITH RADON?

According to EPA, radon is the second leading cause towards lung cancer and the number one cause to non-smokers. When radon and radon decay products are inhaled, they can cause damage to the cells and tissues of the lungs, which can lead to lung cancer over the course of a lifetime. Children's lungs are smaller than adults and they have higher breathing rates; potentially exposing them to higher doses of radiation. Not everyone who is exposed to radon will get lung cancer. The time between exposure and cancer diagnosis may be many years.

HOW DOES RADON ENTER A PROPERTY?

Outdoors, radon poses a significantly smaller risk than it does indoors. Indoors, radon can accumulate to high concentrations. Radon gas can enter a home from the soil through cracks in concrete floors and walls, floor drains, sump pits, construction joints, around pipe penetrations, and through tiny cracks or pores in hollow-block walls. While radon concentrations generally are highest in basements and ground floor rooms that are in contact with the soil, radon levels can reach high levels in main floor and upper floor rooms as well.



RADON TESTING

GOVERNMENT OF THE

EDISTRICT OF COLUMBIA

MURIEL BOWSER, MAYOR

DEPARTMENT

OF ENERGY &

IRONMENT

Radon can be measured easily through inexpensive do-it-yourself testing or by hiring a trained radon professional to perform the testing. The Department of Energy and Environment has free radon test kits DC residents available by visiting the District's Radon webpage at <u>doee.dc.gov/radon</u> or by calling the DC Radon hotline at 202 535-2302.

For professional testing, feel free to visit The National Radon Safety Board (<u>www.nrsb.org</u>) or the American Association of Radon Scientist and Technologist (<u>aarst-nrpp.com</u>). Each organization provides a list of certified radon professionals that can be also be found on the DOEE radon web page.