Introduction

This fact sheet provides recommendations from the Indoor Radon Program at the Ohio Department of Health (ODH) on the benefits of, and techniques for building a radon-resistant home. Prospective builders/buyers must decide for themselves if radon-resistant construction is a good idea for their family's new home.

What is radon and why is it important?

Radon is a naturally occurring radioactive gas that enters buildings from the surrounding soil. It is a naturally occurring, colorless, odorless and tasteless gas. Data collected by the Indoor Radon Program indicates that more than 50% of Ohio homes tested have had levels at or above the U.S. Environmental Protection Agency (EPA) recommended action level of 4pCi/l of air (4 picocuries per liter of air)

How can radon-resistant new construction protect my family?

Radon-resistant construction combines common building techniques and sealing of soil gas entry points to help keep radon from entering the home.

What are the benefits of building a home radon resistant?

• **It reduces your family's risk of lung cancer.** People who live in radon-resistant homes will breathe in less radon. The less radon your family is exposed to, the lower their risk of lung cancer from this form of radiation.

• **It can be a cost savings.** Adding radon-resistant features to a new home will typically add $300 - $750 to the cost of the home. Installing a radon mitigation system in a home after it is built can cost up to $2,000 or more.

• **System components are incorporated into the building design.** When radon-resistant features are part of the home's design, they can easily be hidden from view. This may not be possible if a radon mitigation system has to be added after the house is finished.

• **Is it effective?** A basic radon reduction system, called a passive sub-slab depressurization system, has been proven to reduce radon levels below EPA's recommended action level.

Can a radon problem be predicted prior to construction?

No. It isn't possible to predict if a home will have elevated radon levels before it is finished and occupied. Testing soil before building would be very expensive and cannot reliably forecast how much radon will enter and accumulate in the home. Many other factors that are unique to a specific house's construction and operation also influence the amount of radon that is present in the home after it is built and occupied. Every home in Ohio has the potential for elevated indoor radon levels.

Should I test for radon after the home is finished?

The Indoor Radon Program recommends every Ohio home, even those built radon resistant, be tested for radon. The only way to find out if the amount of radon in your home poses an unacceptable risk to your family is to test after you have finished moving. The Indoor Radon Program and the EPA recommend to test your home every 2 years even if the home has a radon mitigation system.

What can be done if the radon level is high?

A home built with radon resistant features will have a passive radon-control system already in place. The system can be activated if unacceptable radon levels are present. The system is activated by installing a radon fan. The fan is usually installed the attic and once it is installed it will draw radon and other soil gases from beneath the home and exhausts them to the outdoors. A system failure-warning device should also be installed to alert you if the system malfunctions.

Where can I get more information on radon?

Copies of EPA publications and other information on radon may be obtained at:
www.epa.gov/radon

Data and information on radon in Ohio can be found on the Indoor Radon Program web site at:
www.odh.ohio.gov or by calling 1-800-523-4439.