Asbestos FACTSheet

ENERGY OFFICE
STATE OF NEBRASKA
WWW . NEO . NE . GOV

What Is Asbestos?

- Asbestos is a mineral fiber. It can be positively identified only with a special type of microscope. There are several types of asbestos fibers. In the past, asbestos was added to a variety of products to strengthen them and to provide heat insulation and fire resistance.

How Can Asbestos Affect My Health?

From studies of people who were exposed to asbestos in factories and shipyards, we know that breathing high levels of asbestos fibers can lead to an increased risk of:

- Lung cancer;
- Mesothelioma, a cancer of the lining of the chest and the abdominal cavity; and
- Asbestosis, in which the lungs become scarred with fibrous tissue.

The risk of lung cancer and Mesothelioma increases with the number of fibers inhaled. The risk of lung cancer from inhaling asbestos fibers is also greater if you smoke. People who get asbestosis have usually been exposed to high levels of asbestos for a long time. The symptoms of these diseases do not usually appear until about 20 to 30 years after the first exposure to asbestos.

Where Can I Find Asbestos And When Can It Be A Problem?

Most products made today do not contain asbestos. Those few products made which still contain asbestos that could be inhaled are required to be labeled as such. However, until the 1970s, many types of building products and insulation materials used in homes contained asbestos. Common products that might have contained asbestos in the past, and conditions which may release fibers, include:

- STEAM PIPES, BOILERS, and FURNACE DUCTS insulated with an asbestos blanket or asbestos paper tape. These materials may release asbestos fibers if damaged, repaired, or removed improperly.
- RESILIENT FLOOR TILES (vinyl asbestos, asphalt, and rubber), the backing on VINYL SHEET FLOORING, and ADHESIVES used for installing floor tile. Sanding tiles can release fibers. So may scraping or sanding the backing of sheet flooring during removal.
- CEMENT SHEET, MILLBOARD, and PAPER used as insulation around furnaces and woodburning stoves. Repairing or removing appliances may release asbestos fibers. So may cutting, tearing, sanding, drilling or sawing insulation.
- SOUNDPROOFING OR DECORATIVE MATERIAL sprayed on walls and ceilings. Loose, crumbly, or water-damaged material may release fibers. So will sanding, drilling or scraping the material
- PATCHING AND JOINT COMPOUNDS for walls and ceilings, and TEXTURED PAINTS. Sanding, scraping, or drilling these surfaces may release asbestos
- ASBESTOS CEMENT ROOFING, SHINGLES, and SIDING. These products are not likely to release asbestos fibers unless sawed, drilled or cut.

Examples of Where Asbestos Hazards May Be Found In The Home

- Some roofing and siding shingles are made of asbestos cement.
- Houses built between 1930 and 1950 may have asbestos as insulation.
- Attic and wall insulation produced using vermiculite ore. Asbestos may be present in textured paint and in patching compounds used on wall and ceiling joints. Their use was banned in 1977.
- Artificial ashes and embers sold for use in gas-fired fireplaces may contain asbestos
- Walls and floors around woodburning stoves may be protected with asbestos paper, millboard, or cement sheets
- Asbestos is found in some vinyl floor tiles and the backing on vinyl sheet flooring and adhesives.
- Hot water and steam pipes in older houses may be coated with an asbestos material or covered with an asbestos blanket or tape.

Asbestos Do's And Don'ts for the Homeowner

- Do keep activities to a minimum in any areas having damaged material that may contain asbestos.
- Do take every precaution to avoid damaging asbestos material.
- Do have removal and major repair done by people trained and qualified in handling asbestos. It is highly recommended that sampling and minor repair also be done by asbestos professionals.
- Don't dust, sweep, or vacuum debris that may contain asbestos.
- Don't saw, sand, scrape, or drill holes in asbestos materials.
- Don't use abrasive pads or brushes or power strippers to strip wax from asbestos flooring. Never use a power stripper on a dry floor.
- Don't sand or try to level asbestos flooring or its backing. When asbestos flooring needs replacing, install new floor covering over it, if possible.

Major repairs must be done only by a professional trained in methods for safely handling asbestos.

Minor repairs should also be done by professionals since there is always a risk of exposure to fibers when asbestos is disturbed.

Doing minor repairs yourself is not recommended since improper handling of asbestos materials can create a hazard where none existed.

For more information on asbestos in other consumer products, call the CPSC Hotline or write to the U.S. Consumer Product Safety Commission, Washington, DC 20207. The CPSC Hotline has information on certain appliances and products, such as the brands and models of hair dryers that contain asbestos.

Call CPSC at 1-800-638-CPSC. A teletypewriter (TTY) for the hearing impaired is available at 1-800-638-8270. The Maryland TTY number is 1-800-492-8104.

This material was prepared with the support of the U.S. Department of Energy (DOE), Low Income Weatherization Assistance Program Grant No. DE-EE0000137 funded under the *American Recovery and Reinvestment Act of 2009*. However, any opinions findings conclusions or recommendations expressed herein are those of the author and do not necessarily reflect the views of DOE.

Radon FACTSheet

ENERGY OFFICE
STATE OF NEBRASKA
WWW . NEO . NE . GOV

What is Radon?

Radon is an invisible, naturally occurring, colorless, odorless, radioactive gas that is a daughter product of the decay of uranium. The U.S. Environmental Protection Agency (EPA, 1992) estimated that between 7,000 and 30,000 lung cancer deaths in the United States each year are caused by breathing radon gas. In fact, radon is believed to be second only to smoking as the major cause of lung cancer in the United States. Although the EPA and the Surgeon General warn that smokers have a higher risk of developing lung cancer from radon exposure than non-smokers, the radon levels in all homes can be reduced.

Random Radon Testing in Nebraska

In Nebraska, a random survey of over two thousand homes during the heating season of 1989-1990 found more than half had radon screening tests above the EPA "action level". Although many Nebraska homes are "slightly high", few Nebraska readings have been in the "very high" category.

To assess the indoor radon problem in Nebraska, the following survey design objectives were used:

- Define any areas demonstrating potential for significant indoor radon gas concentrations. ("hot spots")
- Assess the magnitude and extent of the radon public health threat within these "hot spots".
- Characterize the distribution of radon gas concentrations in homes across the state and in regions of the state.
- Assess the magnitude of the radon public health threat throughout Nebraska. Single-family, owner-occupied detached homes with permanent foundations were randomly selected to participate in the survey. At least one home in every county of Nebraska was tested for the survey.

How Radon Testing Was Done

Participating homes were tested using charcoal canister detectors in the basement or lowest livable level of the house for a period of two to seven days during the heating season. These screening measurements represent conservative estimates of maximum indoor radon concentrations and can be used to indicate potential problems. The data collected lead to the following conclusions:

- Approximately 54% of single family detached homes in Nebraska can expect to have indoor radon screening levels greater than the EPA recommended action level of 4 pCi/l. This represents the third highest percent of homes in the United States.
- The statewide average screening level of 5.5 pCi/l represents the fourth highest average in the United States.
- Only about 2% of the homes tested above 20 pCi/l, and only one home tested higher than 100 pCi/l. Although many homes have elevated levels, most are only slightly high and very few have levels of immediate concern.
- Eastern Nebraska, especially the Northeastern counties, is where the highest indoor radon concentrations are found.

Nebraska's Radon Profile

Nebraska had 53 of its 93 counties designated Zone 1 counties (counties that have a predicted average indoor screening level greater than 4 pCi/l). Zone 2 counties (counties that have a predicted average indoor screening level between 2 and 4 pCi/l) numbered 24, and the remaining 16 counties were designated as Zone 3 (counties that have a predicted average indoor screening level below 2 pCi/l). Counties with the highest potential were located in Eastern and Southern Nebraska, and the Sand Hills area has, in general, low radon potential.

Who Should Test for Radon?

All Nebraska homes should be tested for radon because any home can have a radon problem. This means new and old homes, well-sealed and drafty homes, and homes with or without basements. Only individual testing can determine which houses may have a radon problem. You cannot base your radon level on a neighbors test result. Every house is different! Measuring radon levels in your home is simple and inexpensive. Coupons for test kits are available from the Nebraska Department of Health and Human Services Radon Program office.

The Nebraska Department of Health and Human Services Radon Program can provide you with a list of companies offering radon measurement or mitigation services in Nebraska. Pamphlets, brochures and other materials on radon are also available.

Questions or requests for information about radon can be directed to:
Nebraska Department of Health and Human Services Regulation and Licensure Radon Program
301 Centennial Mall South, P.O. Box 95007
Lincoln NE 68509-5007
Phone: (402) 471-0594 Fax: (402) 471-6436 Radon Hotline: (800) 334-9491

This material was prepared with the support of the U.S. Department of Energy (DOE), Low Income Weatherization Assistance Program Grant No. DE-EE0000137 funded under the *American Recovery and Reinvestment Act of 2009*. However, any opinions findings conclusions or recommendations expressed herein are those of the author and do not necessarily reflect the views of DOE.