# **Fact Sheet on Asbestos**

# WHAT IS ASBESTOS?

Asbestos is a naturally occurring mineral found in certain rock formations, mined from open pit mines. Most of the asbestos used in the United States today comes from Canada. Three kinds of asbestos are most commonly found in the United States: chrysotile, "white asbestos"; amosite, "brown asbestos"; and crocidolite, "blue asbestos".

Asbestos was called the "miracle fiber: because it could be used in so many different products. Asbestos was not expensive, easy to work with, and it was abundant. The fibers were wonderful because they didn't burn and didn't conduct heat and electricity. The fibers were durable, strong, flexible, and resistant to wear. More than 3000 different products were made using asbestos. Some of these included pipe insulation, sprayed-on fireproofing, floor tiles, ceiling tiles, brake pads, clutch facings, plasters, mastics, adhesives, gaskets, packing materials for valves, asbestos gloves, siding shingles, roofing materials, firemen's clothing, and thousands more products.

#### WHY ARE WE CONCERNED ABOUT ASBESTOS?

In the 1960's evidence began to emerge showing that certain diseases were prevalent among asbestos workers. These were the workers who worked in the mills, manufacturing facilities, shipyards, etc. These people had, for the most part, several years of heavy exposures to the airborne fibers. In other words, they were at high risk of developing an asbestos-related disease. These diseases are asbestosis, lung cancer, mesothelioma, and digestive system cancers. Fibers may be inhaled (breathed in) or ingested. By far the more important source of exposure is inhalation of the fibers. The fibers are very small and can remain in the air for several hours. The ones that can be inhaled deep into the lung are too small to see and have no odor. Asbestosis (not a cancer) is a chronic lung condition where the lungs become scarred and thickened. Breathing becomes very difficult and the disease may get worse even if the person stops working with asbestos. Smoking greatly increases the risk of developing lung cancer. Mesothelioma is a very rare cancer of the lining of the lung or abdominal cavities and is always fatal in 6-18 months after diagnosis. None of the asbestos-related diseases have early warning symptoms and are usually diagnosed several years after the disease begins to develop.

#### WHY AREN'T WE ALL SICK?

Asbestos is everywhere - in the air, soil, and water. Because asbestos exposures can result in cancer, scientists say that there is no known safe level for exposure. However, we know that everyone is exposed during his/her lifetime to some asbestos - it may be in the drinking water and it is in the air at very low levels. HOWEVER, the asbestos-related diseases usually occur in people who have worked with fairly high levels of asbestos for a long time and who were not protected from breathing in the fibers.

# WHO REGULATES ASBESTOS?

The Environmental Protection Agency (EPA) was required by the Clear Air Act to produce regulations to regulate air pollutants hazardous to health. These are called the National Emission Standards for Hazardous Air Pollutants. Asbestos is one of these and regulating it was delegated to the Department. The Department regulates asbestos in many ways:

# Air and Radiation Management Administration:

- 1. Licenses are required for companies that abate asbestos under COMAR 26.11.21. Call toll free (800) 633-6101 for more information.
- 2. Training received by asbestos workers and those persons working with asbestos in schools and public and commercial buildings is covered in COMAR 26.11.23. Call toll free (800) 633-6101 for more information.
- 3. Compliance inspections are carried out in schools that have to comply with the Asbestos Hazard Emergency Response Act. We also provide technical assistance to these schools. Call toll free (800) 633-61-1 for more information.

#### WHAT SHOULD BE DONE ABOUT ASBESTOS IN THE HOME?

If you think asbestos may be in your home, don't panic! Usually the best course is to LEAVE asbestos material that is in good condition ALONE.

Generally, material in good condition will not release asbestos fibers. THERE IS NO DANGER unless fibers are released and inhaled into the lungs.

Check material regularly if you suspect it may contain asbestos. Don't touch it, but look for signs of wear or damage such as tears, abrasions, or water damage. Damaged material may release asbestos fibers. This is particularly true if you often disturb it by hitting, rubbing, or handling it, or if it is exposed to extreme vibration or airflow.

Sometimes, the best way to deal with slightly damaged material is to limit access to the area and not touch or disturb it. Discard damaged or worn asbestos gloves, stovetop pads, or ironing board covers. Check with local health, environmental, or other appropriate officials to find out proper handling and disposal procedures.

If asbestos material is more than slightly damaged, or if you are going to make changes in your home that might disturb it, repair or removal by a professional is needed. Before you have your house remodeled, find out whether asbestos materials are present.

#### ASBESTOS PROFESSIONALS: WHO ARE THEY AND WHAT CAN THEY DO?

Asbestos professionals are trained in handling asbestos material. The type of professional will depend on the type of product and what needs to be done to correct the problem. You may hire a general asbestos contractor or, in some cases, a professional trained to handle specific products containing asbestos.

Asbestos professionals can conduct home inspections, take samples of suspected material, assess its condition, and advise about what corrections are needed and who is qualified to make these corrections. Once again, material in good condition need not be sampled unless it is likely to be disturbed. Professional correction or abatement contractors repair or remove asbestos materials.

Some firms offer combinations of testing, assessment, and correction. A professional hired to assess the need for corrective action should not be connected with an asbestos-correction firm. It is better to use two different firms so there is no conflict of interest. Services vary from one area to another around the country.

The federal government has training courses for asbestos professionals around the country. Some state and local governments also have or require training or certification courses. Ask asbestos professionals to document their completion of federal or state-approved training. Each person performing work in your home should provide proof of training and licensing in asbestos work, such as completion of EPA-approved training. State and local health departments or EPA regional offices may have listings of licensed professionals in your area.

If you have a problem that requires the services of asbestos professionals, check their credentials carefully. Hire professionals who are trained, experienced, reputable, and accredited - especially if accreditation is required by state or local laws. Before hiring a professional, ask for references from previous clients. Find out if they were satisfied. Ask whether the professional has handled similar situations. Get cost estimates from several professionals, as the charges for these services can vary.

Though private homes are usually not covered by the asbestos regulations that apply to schools and public buildings, professionals should still use procedures described during federal or state-approved training. Homeowners should be alert to the chance of misleading claims by asbestos consultants and contractors. There have been reports of firms incorrectly claiming that asbestos materials in homes must be replaced. In other cases, firms have encouraged unnecessary removals or performed them improperly. Unnecessary removals are a waste of money. Improper removals may actually increase the health risks to you and your family. To guard against this, know what services are available and what procedures and precautions are needed to do the job properly.

In addition to general asbestos contractors, you may select a roofing, flooring, or plumbing contractor trained to handle asbestos when it is necessary to remove and replace roofing, flooring, siding, or asbestos-cement pipe that is part of a water system. Normally, roofing and flooring contractors are exempt from state and local licensing requirements because they do not perform any other asbestos-correction work. Call 1-800-USA-ROOF for names of qualified roofing contractors in your area. (Illinois residents call 708-318-6722.) For information on asbestos in floors, read "Recommended Work Procedures for Resilient Floor Covers." You can write for a copy from the Resilient Floor Covering Institute, 966 Hungerford Drive, Suite 12-B, Rockville, MD 20850. Enclose a stamped, business-size, self-addressed envelope.

Asbestos-containing automobile brake pads and linings, clutch facings, and gaskets should be repaired and replaced only by a professional using special protective equipment. Many of these

products are now available without asbestos. For more information, read "Guidance for Preventing Asbestos Disease Among Auto Mechanics," available from regional EPA offices.

#### IF YOU HIRE A PROFESSIONAL ASBESTOS INSPECTOR

- Make sure that the inspection will include a complete visual examination and the
  careful collection and lab analysis of samples. If asbestos is present, the inspector
  should provide a written evaluation describing its location and extent of damage,
  and give recommendations for correction or prevention.
- Make sure an inspecting firm makes frequent site visits if it is hired to assure that
  a contractor follows proper procedures and requirements. The inspector may
  recommend and perform checks after the correction to assure the area has been
  properly cleaned.

# IF YOU HIRE A CORRECTIVE-ACTION CONTRACTOR

- Check with your local air pollution control board, the local agency responsible for worker safety, and the Better Business Bureau. Ask if the firm has had any safety violations. Find out if there are legal actions filed against it.
- Insist that the contractor use the proper equipment to do the job. The workers must wear approved respirators, gloves, and other protective clothing.
- Before work begins, get a written contract specifying the work plan, cleanup, and
  the applicable federal, state, and local regulations which the contractor must
  follow (such as notification requirements and asbestos disposal procedures).
  Contact your state and local health departments, EPA's regional office, and the
  Occupational Safety and Health Administration's regional office to find out what
  the regulations are. Be sure the contractor follows local asbestos removal and
  disposal laws. At the end of the job, get written assurance from the contractor that
  all procedures have been followed.
- Assure that the contractor avoids spreading or tracking asbestos dust into other
  areas of your home. They should seal the work area from the rest of the house
  using plastic sheeting and duct tape, and also turn off the heating and air
  conditioning system. For some repairs, such as pipe insulation removal, plastic
  glove bags may be adequate. They must be sealed with tape and properly disposed
  of when the job is complete.
- Make sure the work site is clearly marked as a hazard area. Do not allow household members and pets into the area until work is completed.
- Insist that the contractor apply a wetting agent to the asbestos material with a hand sprayer that creates a fine mist before removal. Wet fibers do not float in the air as easily as dry fibers and will be easier to clean up.
- Make sure the contractor does not break removed material into small pieces. This
  could release asbestos fibers into the air. Pipe insulation was usually installed in
  preformed blocks and should be removed in complete pieces.
- Upon completion, assure that the contractor cleans the area well with wet mops, wet rags, sponges, or HEPA (high efficiency particulate air) vacuum cleaners. A regular vacuum cleaner must never be used. Wetting helps reduce the chance of

spreading asbestos fibers in the air. All asbestos materials and disposable equipment and clothing used in the job must be placed in sealed, leakproof, and labeled plastic bags. The work site should be visually free of dust and debris. Air monitoring (to make sure there is no increase of asbestos fibers in the air) may be necessary to assure that the contractor's job is done properly. This should be done by someone not connected with the contractor.

# **USE CAUTION!**

Do not dust, sweep, or vacuum debris that may contain asbestos. These steps will disturb tiny asbestos fibers and may release them into the air. Remove dust by wet mopping or with a special HEPA vacuum cleaner used by trained asbestos contractors.

# LEARN MORE:

www.mde.state.md.us/Programs/AirPrograms/Asbestos/Asbestos\_Forms/index.asp www.mde.state.md.us/assets/document/Air/Contractors.pdf www.epa.gov/asbestos/ www.epa.gov/asbestos/ashome.html www.mde.state.md.us/Programs/AirPrograms/Asbestos/about\_asbestos/index.asp