



## **ASBESTOS**

Asbestos is a mineral fiber found in rocks. There are several kinds of asbestos fibers, all of which are fire resistant and not easily destroyed or degraded by natural processes.

Uncontrolled, crumbling asbestos is a hazard. It has been well established that asbestos fiber can become embedded in the lung tissue, causing an irritation that often develops into lung cancer ten to twenty years or more after the initial contact occurs. What, then, should we be concerned about with regard to asbestos in our homes?

## **WHERE IS ASBESTOS FOUND?**

First, approximately 20% of all homes are estimated to have some asbestos in them. Throughout the seventies, the Environmental Protection Administration (EPA) and Consumer Products Safety Commission (CPSC) banned or prohibited the use of several asbestos containing products in the construction industry. Approximately 50% of homes more than 50 years old, however, are likely to contain some asbestos.

Asbestos is contained in many different materials. Technically, there are very few examples of pure asbestos. Typically, it is contained in what is referred to as an ACM or Asbestos Containing Material.

Insulation on heating equipment and heating pipes is one of the more common asbestos containing materials. The fiber content of this material has much to do with its degree of hazard. Some types of asbestos insulation (that which appears similar to corrugated cardboard) has a relatively low fiber content while that which appears more like a solid papier mache material has a higher fiber content, often in excess of 50%. Furnace cement and other insulations used on old heating equipment also often contain asbestos fiber.

Asbestos also occurs in wall plaster, certain types of floor tile, wall shingles, wall and ceiling insulation in some homes constructed between 1930 and 1950, certain types of sprayed or troweled on ceiling treatments, roof shingles and others.

## **WHAT IS THE HEALTH RISK?**

The most hazardous asbestos fiber is very tiny, very sharp and very hard. However, different types of asbestos have different characteristics, some are less hazardous than others. Only lab tests can determine the type and quantity of asbestos present.

The degree of risk represented by the presence of asbestos is largely a function of its friability. Basically, friability is an indication of how easily the asbestos fiber can become dislodged from the ACM. Softer insulations and aging wall plaster are quite friable while asbestos shingles, asbestos floor tile and other similar materials are considered to be essentially non-friable and therefore non-hazardous.

## **HOW IS IT BEST CONTROLLED?**

Asbestos can be controlled by encapsulation or removal. While removal is ideal, it should be approached with great caution since careless removal can lead to more extensive contamination of a building than if the material had been left alone. Encapsulation simply means wrapping the material with a durable enclosure resistant to mechanical damage. Duct tape or a plaster impregnated cloth are among the preferred materials for encapsulation. Asbestos containing plaster can be encapsulated using good quality paint if the plaster itself is reasonably sound.

The Environmental Protection Agency has enacted many regulations with regard to the removal and disposal of asbestos. At this time, however, there are no regulations that require this material to be removed from homes. What you do with it in your own home (at this point in time) is up to you. The existing regulations only affect how you remove it and where you dispose of it.

Many contractors represent themselves as experts in asbestos removal. Since not all states have enacted certification or licensing procedures for asbestos contractors, one should exercise great care in selecting a contractor to deal with asbestos in any home. Otherwise, the environment of the home could become contaminated as a result of careless removal procedures.

Keep in mind that undisturbed asbestos containing materials are generally not considered hazardous. It is only when the material begins to deteriorate or becomes disturbed (for example, by careless removal) that asbestos fiber could be released into the air and thus become hazardous to anyone breathing in that environment.

Of particular concern are older homes where an old heating system has already been removed. Often the asbestos insulation was carelessly removed. This could have resulted in the discharge of many asbestos fibers into the environment of this home. If you suspect such a condition, the best approach is to retain the services of a competent asbestos testing laboratory to sample both the air quality and any dust present in closets and basements to determine if any residual asbestos fiber might still exist in the building.

This discussion is intended to provide an overview. It should not be considered an official, technical document. If you suspect asbestos is present in any materials in your home, the best approach is to have samples of the material tested by a competent testing laboratory to determine first, the presence of asbestos fiber, and second, the percentage of asbestos fiber contained in the material. After that, a competent plan can be developed to encapsulate or remove the material.

Asbestos is a proven hazard and should be handled very carefully.

For more information, we recommend contacting a competent testing laboratory. These are usually listed under Asbestos or Laboratories - Testing in the yellow pages. You may also wish to contact:

The Environmental Protection Agency  
Office of Toxic Substances, Exposure Evaluation Division  
Washington, DC 20460

U.S. Consumer Protection Agency  
Washington, DC 20207

or your state department of environmental protection.