Asbestos Facts

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There are six asbestos minerals which have been used commercially

Chrysotile	Amosite
Crocidolite	Anthophyllite
Tremolite	Actinolite

What is asbestos?

Asbestos is the name given to a group of minerals that occur naturally in the environment as bundles of fibers. These fibers can be separated into thin, durable threads that are flexible enough to be spun and woven. They are resistant to heat, fire, and chemicals, and do not conduct electricity. Because of these features, asbestos has had many industrial uses since the late 1800s.

Building and construction industries have used asbestos for roofing shingles, ceiling and floor tiles, paper products, paints, coatings, insulations, and asbestos cement products. The automotive industry has used asbestos in clutch, brake, and transmission parts, as well as gaskets, heat-resistant fabrics, and packaging. Although asbestos has proven to be useful in manufacturing processes, it has been suspected of causing environmental and health hazards. Due to stiffer regulations coupled with widespread community concern about the hazards of asbestos exposure, use in the U.S. has significantly declined in the last 40 years.

What happens to asbestos in the environment?

Asbestos can enter the environment when natural deposits or products containing asbestos are disturbed. When this happens, tiny asbestos fibers are released into the air. Small fibers may remain suspended in air for a long time. The fibers may then be carried a long distance before settling. Larger fibers tend to travel a shorter distance, settling more quickly.

Asbestos cannot be easily broken down once it enters the environment. Because of this, asbestos can remain unchanged in the environment for long periods of time.

How might I be exposed to asbestos?

In order for an exposure to occur, material containing asbestos must be disturbed in some way that would release the fibers. Fibers may be released when doing home maintenance, repairs, and/or remodeling, if building materials inside the home contain asbestos. The demolition of older buildings that contain asbestos products is a common source of asbestos releases into the environment.

Vermiculite is a naturally-occurring mineral composed of shiny flakes. When heated to a high temperature, flakes of vermiculite expand into a light-weight, fire-resistant, and odorless material. Although not all vermiculite contains asbestos, some products made from vermiculite may contain asbestos.

A mine near Libby, Montana, was the source of over 70 percent of all vermiculite sold in the United States from the early 1900s to the 1990s. Vermiculite from Libby was used in the majority of vermiculite insulation in the United States and was often sold under the brand name Zonolite. Homes or structures containing vermiculite insulation, especially the "Zonolite" brand, may contain asbestos.

Occupational exposure to asbestos fibers may occur through inhalation in workplaces that make or use asbestos products or mine for asbestos.

Family members of asbestos workers can also be exposed to higher levels of asbestos if fibers are carried home on the workers' clothing

There have been some instances when drinking water has been found to contain asbestos from natural sources or from cement pipes containing asbestos.

Although everyone is exposed to asbestos in the air, most people do not become ill from these low level exposures. Health effects from asbestos exposures are seen in people who are exposed to asbestos on a regular basis, most often in a job setting.

How can asbestos affect my health?

When asbestos fibers are inhaled, they may get trapped in the lungs and remain there for a long time. These fibers can build up and cause scarring and inflammation of the lungs and the lining surrounding the lungs. This process results in a disease called asbestosis. This can affect breathing and lead to serious health problems. Asbestosis is usually found in workers exposed to asbestos, and seldom occurs in the general public.

Asbestos is a known human carcinogen (a substance that causes cancer). It is known that exposure to asbestos may increase the risk of lung cancer and mesothelioma. Mesothelioma is a relatively rare cancer that affects the thin membranes that line the chest and abdomen. Although rare, mesothelioma is the most common form of cancer associated with asbestos exposure. Some studies of workers indicate that exposure to asbestos may increase the risk of stomach and colon cancers, as well as elevated risk for cancers of the throat, kidney, esophagus, pancreas, intestines, and gallbladder.

Smokers exposed to asbestos on a regular basis have an increased risk of getting lung cancer. Studies have shown that asbestos-exposed workers who quit smoking can significantly reduce their risk of developing lung cancer. People who are heavy smokers may want to consider having their personal physician screen for lung cancer as a preventative measure.

How can families reduce their risk of exposure to asbestos?

Asbestos-containing materials that are not disturbed or in good condition usually do not pose a health risk and should be left alone. Some suggestions for reducing the risk of exposure include:

- Determine the presence of asbestos in your building/home before doing any renovation or demolition
- Always use approved removal methods when disturbing materials that contain asbestos
- If possible, hire a qualified contractor for asbestos removal to prevent contaminating your home or causing any exposure to you and your family
- Use any products containing asbestos outdoors or in a well-ventilated area
- Workers should use all protective equipment provided by their employers and follow recommended workplace practices and safety procedures
- Avoid bringing clothing of exposed workers into the home
- Workers should talk to their doctor about whether or not they should be screened regularly for signs of asbestos-related diseases.

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