



Asbestos: Facts and Tips for Homeowners

What Is Asbestos?

Asbestos is a mineral fiber that 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. International Association of Professional Property Managers inspectors can supplement their knowledge with the information offered in this guide.

How Can Asbestos Affect Human 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 in the forms of mesothelioma, which is 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 increase 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.

Most people exposed to small amounts of asbestos, as we all are in our daily lives, do not develop these health problems. However, if disturbed, asbestos material may release asbestos fibers, which can be inhaled into the lungs. The fibers can remain there for a long time, increasing the risk of disease. Asbestos material that would crumble easily if handled, or that has been sawed, scraped, or sanded into a powder, is more likely to create a health hazard.

Where Would Asbestos Be Found, 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, and so may scraping or sanding the backing of sheet flooring during removal;

- cement sheet, millboard and paper used as insulation around furnaces and wood-burning stoves. Repairing or removing appliances may release asbestos fibers, and so may cutting, tearing, sanding, drilling, or sawing insulation;

- door gaskets in furnaces, wood stoves and coal stoves. Worn seals can release asbestos fibers during use;

- soundproofing or decorative material sprayed on walls and ceilings. Loose, crumbly or water-damaged material may release fibers, and 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 fibers;

- asbestos cement roofing, shingles and siding. These products are not likely to release asbestos fibers unless sawed, drilled or cut;

- artificial ashes and embers sold for use in gas-fired fireplaces, and other older household products, such as fireproof gloves, stove-top pads, ironing board covers and certain hairdryers; and

- automobile brake pads and linings, clutch facings and gaskets.

Where Asbestos Hazards May Be Found in a Home

- Some roofing and siding shingles are made of asbestos cement.

- Houses built between 1930 and 1950 may have asbestos as insulation.

- 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.

- Older products, such as stove-top pads, may have some asbestos compounds.

- Walls and floors around wood-burning 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.

- Oil and coal furnaces and door gaskets may have asbestos insulation.

What Should Be Done About Asbestos in the Home?

If you think asbestos may be in your home, don't panic. Usually, the best thing to do 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 the asbestos is disturbed and fibers are released and then 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 air flow. 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, stove-top pads and ironing board covers. Check with local health, environmental or other appropriate agencies 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.

How to Identify Materials That Contain Asbestos

You can't tell whether a material contains asbestos simply by looking at it, unless it is labeled. If in doubt, treat the material as if it contains asbestos, or have it sampled and analyzed by a qualified professional. A professional should take samples for analysis, since a professional knows what to look for, and because there may be an increased health risk if fibers are released. In fact, if done incorrectly, sampling can be more hazardous than leaving the material alone. Taking samples yourself is not recommended. If you nevertheless choose to take the samples yourself, take care not to release asbestos fibers into the air or onto yourself. Material that is in good condition and will not be disturbed (by remodeling, for example) should be left alone. Only material that is damaged or will be disturbed should be sampled.

Anyone who samples asbestos-containing materials should have as much information as possible on the handling of asbestos before sampling and, at a minimum, should observe the following procedures:

- Make sure no one else is in the room when sampling is done.
- Wear disposable gloves or wash hands after sampling.
- Shut down any heating or cooling systems to minimize the spread of any released fibers.
- Do not disturb the material any more than is needed to take a small sample.
- Place a plastic sheet on the floor below the area to be sampled.
- Wet the material using a fine mist of water containing a few drops of detergent before taking the sample. The water/detergent mist will reduce the release of asbestos fibers.

- Carefully cut a piece from the entire depth of the material using a small knife, corer or other sharp object. Place the small piece into a clean container (a 35-mm film canister, small glass or plastic vial, or high-quality resealable plastic bag).
- Tightly seal the container after the sample is in it.
- Carefully dispose of the plastic sheet. Use a damp paper towel to clean up any material on the outside of the container or around the area sampled. Dispose of asbestos materials according to state and local procedures.
- Label the container with an identification number and clearly state when and where the sample was taken.
- Patch the sampled area with the smallest possible piece of duct tape to prevent fiber release.
- Send the sample to an asbestos analysis laboratory accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) at the National Institute of Standards and Technology (NIST). Your state or local health department may also be able to help.

How to Manage an Asbestos Problem

If the asbestos material is in good shape and will not be disturbed, **do nothing!** If it is a problem, there are two types of corrections: repair and removal. Repair usually involves either sealing or covering asbestos material. Sealing (encapsulation) involves treating the material with a sealant that either binds the asbestos fibers together or coats the material so that fibers are not released. Pipe, furnace and boiler insulation can sometimes be repaired this way. This should be done only by a professional trained to handle asbestos safely. Covering (enclosure) involves placing something over or around the material that contains asbestos to prevent the release of fibers. Exposed insulated piping may be covered with a protective wrap or jacket. With any type of repair, the asbestos remains in place. Repair is usually cheaper than removal, but it may make removal of asbestos later (if found to be necessary) more difficult and costly. Repairs can either be major or minor. 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.