

Asbestos in Your Home

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.

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 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.

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. 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.

ARTIFICIAL ASHES AND EMBERS sold for use in gas-fired fireplaces. Also, other older household products such as FIREPROOF GLOVES, STOVE-TOP PADS, IRONING BOARD COVERS, and certain HAIRDRYERS.

AUTOMOBILE BRAKE PADS AND LININGS, CLUTCH FACINGS, and GASKETS.

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.

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 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.

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 is to leave asbestos material that is in good condition alone.

Generally, material in good condition will not release asbestos fibers.

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, 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.

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. 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.

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 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 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 later removal of asbestos, if necessary, more difficult and costly. Repairs can either be major or minor.

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 on 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.

Don't track material that could contain asbestos through the house. If you cannot avoid walking through the area, have it cleaned with a wet mop. If the material is from a damaged area, or if a large area must be cleaned, call an asbestos professional.

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.

Removal is usually the most expensive method and, unless required by state or local regulations, should be the last option considered in most situations. This is because removal poses the greatest risk of fiber release. However, removal may be required when remodeling or making major changes to your home that will disturb asbestos material. Also, removal may be called for if asbestos material is damaged extensively and cannot be otherwise repaired. Removal is complex and must be done only by a contractor with special training. Improper removal may actually increase the health risks to you and your family.

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.

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 *Current Best Practices for Preventing Asbestos Disease Among Brake and Clutch Repair Workers*.

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 regional office, and the Occupational Safety and Health Administration 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, leak-proof, 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.

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.

More information

To find out whether your state has a training and certification program for asbestos removal contractors, and for information on EPA's asbestos programs, call the EPA at 202-554-1404.

For more information on asbestos identification and control activities, contact the Asbestos Coordinator in the EPA regional office for your region, or your state or local health department.

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.

Contact your local American Lung Association for copies of:

Indoor Air Pollution Fact Sheet - Asbestos

Air Pollution In Your Home?

Other publications on indoor pollution