

Asbestos

WHAT TO DO?

What Is Asbestos?

Asbestos is 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?

Studies of people who were exposed to high levels of asbestos in factories and shipyards, are at increased risk of:

- Lung cancer;
- Mesothelioma, a cancer of the lining of the chest and the abdominal cavity; and
- Asbestos, in the lungs can 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 one smokes. 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 initial exposure to asbestos.

Most people are exposed to small amounts of asbestos daily, but 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 crumbles easily if handled, or that has been sawed, scraped, or sanded into a powder, is more likely to create a health hazard.

Where Is Asbestos and When Can It Be A Problem?

Most products made today do not contain asbestos. Those few products that continue to contain asbestos that could be inhaled are required to be properly labeled. 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 . Repairing or removing appliances may release asbestos fibers. So may cutting, tearing, sanding, drilling or sawing insulation.
- DOOR GASKETS in furnaces, and 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.

Examples of Where Asbestos Hazards May Be Found

- Some roofing and siding shingles are made of asbestos cement.
- Buildings constructed between 1930 and 1950 may have asbestos as insulation.
- Attic and wall insulation produced using vermiculite ore, particularly ore that originated from a Montana mine, may contain asbestos fibers.
- 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.
- Asbestos is found in some vinyl floor tiles and the backing on vinyl sheet flooring and adhesives.
- Hot water and steam pipes in older buildings 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

If you think asbestos may be present, 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. If you suspect asbestos contact the Facilities Services at 808 585-3334.

If asbestos material is more than slightly damaged, repair or remove it by a professional is required. Before renovating, determine if asbestos materials are present by utilizing a professional inspector..

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 and have it sampled and analyzed by a qualified professional. A professional will take samples for analysis, since they know what to look for. 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 renovating, 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 places 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

- 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 trained and qualified professionals in handling asbestos. Sampling and minor repair must 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 a asbestos professional.

Repairs must be done only by a professional trained in methods for safely handling asbestos.

Doing minor repairs yourself is prohibited since improper handling of asbestos materials can create a hazard where none existed.

Removal is usually the most expensive method and must 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 renovating or making major changes. 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.

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 production and what needs to be done to correct the problem. Hire a general asbestos contractor or, in some cases, a professional trained to handle specific products containing asbestos.

Asbestos professionals can conduct 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.

Ask asbestos professionals to document their completion of federal or state-approved training. Each person performing work should provide proof of training and licensing in asbestos work, such as completion of EPA-approved training. The Hawaii State Occupational Safety and Health Administration (OSHA) offices may have listings of licensed professionals in your area.

Hire professionals who are trained, experienced, reputable, and accredited – accreditation is required by state 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.

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.

Hire A Professional Asbestos Inspector

- Make sure that the asbestos inspection will include a complete visual examination and the careful collection and a lab analysis of samples. If asbestos is present, the inspector will provide a written evaluation describing its location and extent of damage, and give recommendations for correction or prevention.
- Make sure an inspection firm makes frequent site visits 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.

Hire A Corrective-Action Contractor

Check with Hawaii State OSHA, responsible for worker safety. 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 Hawaii State OSHA, and the office to find out what the

regulations are. Be sure the contractor follows OSHA 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.

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 up 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 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 a professional inspector 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.