

Labor Department's Asbestos

Frequently Asked Questions

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Asbestos Division
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1. What is asbestos?

Asbestos is a group of naturally occurring minerals. The three most common types of asbestos are:

- a) chrysotile
- b) amosite
- c) crocidolite

Asbestos is commonly used as an acoustic insulator, thermal insulation, fire proofing and in other building materials. Asbestos fibers are incredibly strong and have properties that make them resistant to heat. Asbestos is often found in ceiling tiles, pipe and vessel insulation, blown on to structural beams and ceilings, in floor tile, linoleum and mastic.

2. Why is asbestos a hazard?

Asbestos is made up of microscopic bundles of fibers that may become airborne when disturbed. These fibers get into the air and may become inhaled into the lungs, where they may cause significant health problems. Researchers still have not determined a "safe level" of exposure but we know the greater and the longer the exposure, the greater the risk of developing an asbestos related disease. Some asbestos related diseases include:

- a) Asbestosis - a lung disease first found in Naval shipyard workers. As asbestos fibers are inhaled, they may become trapped in the lung tissue. The body tries to dissolve the fibers by producing an acid. This acid, due to the chemical resistance of the fiber, does little to damage the fiber, but may scar the surrounding tissue. Eventually, this scarring may become so severe that the lungs cannot function. The latency period (meaning the time it takes for the disease to develop) is often 25-40 years.
- b) Mesothelioma - a cancer of the pleura (the outer lining of the lung) and/or the peritoneum (the lining of the abdominal wall). The only known cause of mesothelioma is from asbestos exposure. The latency period for mesothelioma is often 15-30 years.
- c) Cancer - caused by asbestos. The effects of lung cancer are often greatly increased by cigarette smoking (by about 50%). Cancer of the gastrointestinal tract can also be caused by asbestos. The latency period for cancer is often 15-30 years.

Despite the common misconception, asbestos does not cause headaches, sore muscles or other immediate symptoms such as allergies. Although asbestos does not cause allergies, dust created during common renovation activities that often result in disturbance of asbestos, can aggravate allergies. As mentioned above, the effects of asbestos exposure often go unnoticed for 15-40 years.

3. When is asbestos a hazard?

Asbestos is not always an immediate hazard. In fact, if asbestos can be maintained in good condition, it is

recommended that it be left alone and periodic surveillance performed to monitor its condition. It's only when asbestos containing materials are disturbed or the materials become damaged that they become a hazard, and ultimately regulated asbestos-containing materials. When the materials become damaged, the fibers separate and may then become airborne. In the asbestos industry, the term 'friable' is used to describe asbestos that can be reduced to dust by hand pressure. 'Non-friable' means asbestos that is too hard to be reduced to dust by hand. Non-friable materials, such as transite siding and floor tiles are not regulated by the State provided it does not become damaged and friable. Machine grinding, sanding and dry-buffing are some ways of causing non-friable materials to become friable.

4. How are asbestos-containing materials maintained?

Friable asbestos can be maintained in place utilizing several techniques. Encapsulation involves applying a thick layer of an encapsulant, much like latex paint, that binds the surface of the material together and prevents the material from becoming airborne. Encapsulation and routine monitoring are not always enough to prevent damage. When damage occurs, removal may be the best option.

5. When is it necessary to remove asbestos-containing materials?

There is no law that says asbestos has to be removed. It is only when the material can no longer be maintained in good condition and/or has been damaged, or when the building is to be demolished or renovated, that removal may become the only option.

In the State of Oklahoma, asbestos may only be removed by Licensed Asbestos Abatement Contractors, utilizing Licensed Workers and Supervisors. Oklahoma has always been at the forefront of regulating the removal of asbestos containing materials and all projects are inspected by inspectors from the Oklahoma Department of Labor a minimum of three times (Oklahoma's regulations, however, do not apply to private residences or multi-family residences of less than six (6) units or any Federal Property.)

6. When is it required to have a building inspection or survey?

There are Federal Regulations that require all building materials that have not been tested to be presumed to contain asbestos. Only inspection and sampling may rebut the required presumption.

Any building owner who is renovating or demolishing a building is required by Federal law to have their buildings inspected for asbestos containing materials. Buildings are not permitted to be demolished if there is friable asbestos present. Also, public and private schools, K-12, are required by the Asbestos Hazard Emergency Response Act (AHERA), to be inspected and have a management plan prepared, which is to be maintained and available for public inspection.

7. How is asbestos removed?

When removal is planned, a licensed Asbestos Contractor must notify the state Labor Department and the state Department of Environmental Quality ten days in advance of removal. Most projects, are required to have a project design, that details how the contractor will perform the removal. All project designs must be approved by the Oklahoma Department of Labor.

Upon approval from ODOL, workers construct a containment, sealing all possible entries and exits to prevent air from escaping from containment. Containments are maintained under negative pressure and the air is exhausted through special filters that make sure the air exhausted safely. A decontamination unit is built on to the containment, where workers change into disposable suits and respirators upon entering the containment, and shower out before exiting the containment, so as not to contaminate the area outside the containment by tracking out asbestos on their clothes or body. Once the containment is approved by ODOL,

the contractor wets down the material, which helps reduce the airborne fiber count. As the material is wetted, it is scraped from the surfaces and collected in specially labeled disposal bags. When a bag is full, it is sealed well, wiped down and placed into a second bag, which is also sealed. The bags are placed in a load-out chamber to await transfer to a specially lined waste trailer. When all the visible material is removed and bagged, the bags are loaded out to the waste trailer and ODOL performs another inspection. (In progress inspections are performed throughout the removal project.) When the ODOL Inspector is satisfied with the cleanliness of the containment, the contractor sprays the entire area with a 'lock-down', which seals any remaining fibers, those that are not visible, to the poly (a large plastic sheet used to make a containment field). After clearance testing is conducted inside the containment, and the air tests are within the accepted levels, only then is the containment removed and the remaining poly is bagged and disposed of as contaminated waste.

Other abatement techniques, such as removal of pipe insulation via a glove-bag or a mini-containment, are also conducted following procedures outlined by the Department of Labor's Rules for the Abatement of Friable Materials.

8. Where does asbestos go after it is removed?

After removal, the sealed bags are transported by a Licensed Abatement Contractor or a Licensed Asbestos Hauler, to an EPA approved landfill, where it is buried. Disposal manifests are required to be sent to ODOL at the end of each project to ensure the waste arrived at the landfill as required. Anyone hauling asbestos in Oklahoma is required to be licensed as an Abatement Contractor and carry environmental impairment insurance to the total of one million dollars. Under the authority of the EPA, the state Department of Environmental Quality regulates landfills and maintains a list of landfills approved to take asbestos containing waste.

9. How can I tell if I have asbestos in my building?

The only way to tell if a building material contains asbestos is to contact certified asbestos consultant personnel who can send a Licensed Inspector to take bulk samples. These samples are taken back to a lab, where they are analyzed under the microscope to determine the content. OSHA regulations require building owners to presume that any suspect material is asbestos until a laboratory analysis is conducted. Any material that contains less than one percent asbestos is considered non-regulated.

10. Who do I call if I have a concern?

Contact the state Labor Department concerning any possible asbestos problems, or if you'd like a copy of the Licensed Contractor's List or to become a Licensed Contractor, call the Asbestos Division at 405-521-6464.

The Oklahoma Department of Environmental Quality may be contacted concerning renovation or demolition permits and NESHAPS enforcement at 405-702-4100.