Asbestos in the Home: A Homeowner's Guide

What is Asbestos?

Asbestos is a group of minerals. It is made of strong very fine fibers that are heat-resistant and extremely durable. Because of this, asbestos has been used a lot in construction. When asbestos material is disturbed or damaged, it can break down into a dust of microscopic size fibers that remain suspended in the air for a long time and can easily be inhaled or ingested.

Is asbestos dangerous?

Asbestos in your home may be hazardous to your health, depending on its condition. As long as asbestos is stable, undamaged and well-sealed, it is considered safe. When you can crush it with your hand or the surface is not sealed to prevent small pieces from escaping, it is called Friable. In this condition, fibers can be released into the air and pose a health risk. Asbestos can cause lung cancer, asbestosis and mesothelioma. There is no safe level of exposure, so contact with any amount of asbestos should be avoided.

Why is it dangerous?

The body's natural defenses cannot keep asbestos fibers out of the body, and asbestos fibers can remain in the body for many years, and may lead to health problems and disease. Symptoms of these diseases generally do not appear for 10 to 30 years after exposure, so asbestos can cause permanent injuries to the body long before its effects are detectable.

Where can it be found?

- Interior Surfaces: sprayed-on popcorn acoustical ceilings, heat reflectors (woodstoves) & acoustical tiles. Exterior Surfaces: window putty, roof felt & shingles, cement asbestos board siding.
- Heating and Ventilation: heat source covering, door and cover gaskets, pipe insulation, and air duct covering.
- Flooring: sheet vinyls, and tiles.

How to identify asbestos?

You cannot identify asbestos simply by looking at it. The only safe way to find out if a material contains asbestos is to have a sample of the suspect material analyzed by a laboratory. To be safe, treat all suspect materials as if they contain asbestos until you get the results of the laboratory analysis. Laboratories that do this work are usually listed in the Yellow Pages

under "Laboratories Analytical". When taking samples, it is important that you do not release asbestos fibers into the air, onto your skin or onto your clothing. To avoid exposing anyone else, only you should be in the room when taking samples.

How to take a sample?

- Wet down the Material with a light water mist before taking samples. This reduces the potential release of asbestos fibers.
- Do not disturb the material any more than necessary to take a small sample.
- Place the sample in a clean container such as a zip-lock plastic bag or small glass jar.
- Seal the container tightly.
- Use a damp paper towel to clean up any material on the outside of the container or that might have spilled onto the floor.
- Clearly label the container stating where and when the sample was taken.
- Send the sample to a laboratory for analysis, which will probably cost \$20 or \$40 per sample. Make sure to take one sample for each different type of suspect material.

What to do if you have asbestos?

In good condition (not broken or disturbed) asbestos presents no danger. There's a good chance you can solve problems involving deteriorating asbestos without removing the asbestos. Removal is generally the last resort because it involves disturbing the material and sending more asbestos fibers into the air. Once it becomes damaged, however, or when materials containing asbestos need to be replaced due to remodeling or renovation, the Department of Environmental Quality (DEQ) recommends that you call a professional asbestos abatement contractor who has special training to deal with these material. A licensed asbestos abatement contractor will use glove bags for pipe insulation removal, or erect an enclosure of two layers of plastic for removing materials such as ceiling spray-on asbestos and flooring. A contractor will have a HEPA vacuum, a negative pressure air machine, approved respirators, disposable clothing and a supply of glove bags and miscellaneous tools for the removal and cleanup. Air samples may be taken after work is completed to ensure that the area is clean safe.



Air Quality

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Don't try to remove asbestos yourself

For a list of Oregon licensed asbestos contractors call 1-800-452-4011 and ask for the DEQ Asbestos Program or call the DEQ regional office nearest you. Phone numbers are listed at the end of this report.

For the safety of you and your family, DEQ strongly recommends that you do not do your own asbestos removal. Removing asbestos requires special equipment and detailed training which is expensive and time consuming for a homeowner. More importantly, removing asbestos without proper training poses a big health risk from fibers being released.

There is no law, however, preventing a residential owner-occupant from repairing or removing asbestos. If you decide to do your own work, make sure you call the DEQ for advice. You can obtain asbestos safety equipment such as respirators, disposable clothing and 6 mil plastic bags from a safety equipment store listed in the Yellow Pages.

Hiring The Right Contractor

When choosing a professional to work with asbestos, remember that most home repair or remodeling contractors do not have an asbestos abatement license or certified workers, and are not equipped to work safely with asbestos. Without proper equipment and expertise, uncertified workers could spread asbestos fibers throughout your home and neighborhood. They may create an asbestos hazard where none existed or make an existing situation worse. Before you select a contractor and make an agreement to have asbestos removed from your home, ask the contractor for references from former customers. You should also call the DEO at (503) 229-5982 or 1-800-452-4011 to determine if the contractor has received asbestos violations, or the Construction Contractors Board in Salem at (503) 378-4621 to find out if the contractor has received any other violations. Once again, for a list of licensed abatement contractors, call 1-800-452-4011 and ask for the DEQ Asbestos Program.

What To Do If Asbestos Has Been Released In Your Home

If you think a significant amount of asbestos has been released in your home (for example, three to five square feet of spray-on ceiling material or one to two feet of pipe insulation), immediately take the following measures:

- Close off the part of the house where the asbestos release occurred.
- Close off air ducts and vents.
- Shut windows.

- Tape bottoms of doors to prevent drafts.
- Contact an asbestos professional or DEQ immediately.
- Take samples of dust or debris from floor, shelves or window sills to be analyzed by a laboratory.
- Air samples may also be needed. If so, contact a laboratory or contractor who has the proper training and equipment to take the air samples.

How to repair it

There's a good chance you can solve problems involving deteriorating asbestos without actually removing it. Remember, removal is generally the last resort because it involves disturbing the material and sending more asbestos fibers into the air.

Pipe, furnace and boiler insulation

When the insulation material moves at the touch of your hand or the cover no longer feels firm and tight, the insulation is probably too deteriorated for repair. DEQ recommends you call an Oregon licensed asbestos abatement contractor for this work. Only when the insulation is firm and the cover is tight, with very few holes or tears in the insulation (no more than one hole in every one to three feet of pipe covering) should you try to repair it yourself.

To repair areas with minor damage such as this, use commercial products specifically designed to fill holes and seal damaged areas in asbestos pipe insulation. You'll find the necessary equipment and materials at safety supply stores which specialize in selling asbestos related products.

Sprayed on asbestos-containing material on ceilings. Do not disturb this in any way. If the material has never been painted, a coat of penetrating or bridging encapsulant can be sprayed on with an airless sprayer to seal the surface. This will ensure that no fibers are released. Do not use a brush or roller. Penetrating encapsulants soak into the material and firmly adhere it to the ceiling. It should be noted that this will make future removal more difficult.

A light coat of latex base paint may be used as a bridging encapsulant and may be used even if the material has previously had an encapsulant applied to it. Remember that you should not build up such a thick coat that the added weight will increase the chances that the material containing the asbestos will separate from the ceiling.

What if you remodel?

If you have material containing asbestos in your home, you may be required to notify authorities before you remodel, dismantle, or demolish all or part of your home.

The law requires that "no visible emissions" of dust be allowed during removal, transportation and disposal of material containing asbestos.

DEQ strongly suggests you do not perform your own asbestos removal. However, if you should decide to, there are certain requirements. Call DEQ's Asbestos program at 1-800-452-4011 to find out more.

Disposal requirements

All asbestos waste and the disposable clothing, filters, equipment and building materials must be disposed of as asbestos waste. These materials are not to be cleaned and re-used. The materials must be placed in double 6 mil plastic bags, labeled as asbestos, hauled to an approved asbestos landfill in a covered vehicle and disposed of according to DEQ regulations. You or your contractor should contact DEQ or, in Lane County, the local air pollution control authority, to determine notification, removal and disposal requirements and sites.

Disposal Procedures (asbestos waste materials must be disposed of according to DEQ regulations.)

- Place all dampened filters, cloths, mop heads and other asbestos wastes into transparent 6 mil plastic bags.
- Seal the bag with heavy duty tape.
- Place the first bag into a second bag of the same type.
- Be sure to use 6 mil plastic bags purchased from a safety supply store with the following message pre-printed on them:

DANGER
Contains Asbestos Fibers
Avoid Creating Dust
Cancer and Lung Disease Hazard
Avoid Breathing Airborne
Asbestos Fibers

For further information:

Oregon Administrative Rules, DIVISION 248 - ASBESTOS REQUIREMENTS DEO Offices:

Northwest Region - Portland Office - (503) 229-5982

Eastern Region

Bend Office, (541) 388-6146 Pendleton Office, (541) 276-4626

Western Region:

Coos Bay Office, (541) 269-2721, ext 22

Medford Office, (541) 776-6010 Salem Office, (503) 378-8240 ext 272

Lane County - Lane Regional Air Pollution Authority (541) 726-1056 Oregon Department of Environmental Quality -811 SW 6th Avenue, Portland, OR 97204 – (800) 452-4011 (Ask for asbestos program)

Note: This report is available in alternate format and in Spanish by contacting DEQ Public Affairs, (503) 229-6488 or toll free in Oregon (800) 452-4011. DEQ also has two-page asbestos fact sheets printed in Vietnamese and Russian.

People with hearing impairments may call DEQ's TDD at (503) 229-6993.

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- Seal the second bag with heavy duty tape.
- Take the sealed and labeled bags to an approved waste disposal site. Call the landfill before taking the asbestos wastes there for disposal.