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A Homeowner's Guide

What is asbestos?

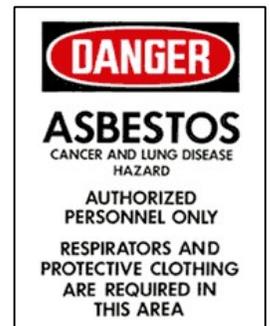
Asbestos is a naturally occurring mineral fiber that has been used in more than 3,000 different construction materials and manufactured products. It is commonly found in heating system insulation, decorative spray-on ceiling treatments, vinyl flooring, cement shake siding, and a variety of additional materials. Some asbestos-containing materials were still being installed into the late 1980s.

The asbestos content of different materials varies according to the product and how it is used. Among those materials with higher concentrations of asbestos are insulating products on heating systems and the backing on sheet vinyl flooring. If asbestos-containing materials are disturbed

– with age or remodeling – they may be dangerous to your health.



Airborne asbestos is a serious health hazard.



- **Breathing asbestos fibers could kill you.**

When disturbed, asbestos breaks down into fibers up to 1,200 times thinner than a human hair. If released into the air, asbestos cannot be seen and quickly circulates through your home. When inhaled, these fibers become trapped in lung tissues. Medical research tells us that up to 30 years after inhalation, *asbestos fibers can cause lung cancer* and mesothelioma, a related terminal cancer of the tissue that lines the chest cavity.

There is no known safe level of asbestos exposure. That's why medical, environmental health, and regulatory organizations, stress the need to protect health by minimizing exposure to airborne asbestos fibers, particularly at elevated levels. Elevated levels result from uncontrolled disturbances and removals of asbestos-containing materials – such as during a remodeling project.

• How to find asbestos in your home

To find out if your home contains asbestos, follow these three steps:

1. Look in the following places...

Heating Systems

Many home heating appliances and heating systems contain asbestos insulation or gasket materials. It's common to find it as insulation on old furnaces and boilers, heating ducts, and hot water pipes or in insulating board materials installed under or around heating appliances.

Spray-On "Popcorn" Ceilings

This heavily textured ceiling application was common from the mid-1960s through the early 1980s. It is extremely fragile, so it releases asbestos fibers quite readily when disturbed.

Vinyl Flooring

Sheet vinyl and vinyl tiles may contain asbestos. Sheet vinyl can be dangerous to remove because it may be backed with felt that contains high concentrations of asbestos. Fibers may be readily released into the air if this backing is disturbed while it is dry. Tiles are generally safer because asbestos fibers are bound up inside the tiles in a petroleum base.

House Siding

Cement asbestos-board siding is a very dense, brittle product used primarily in the 1940s, 1950s, and into the 1960s.

Other possibilities

Additional materials in the home that may contain asbestos include –acoustical ceiling tiles, plaster, stucco, knob-and tube wire insulation, and artificial fireplace logs and ashes.



2. Seek product information or request a lab test

Look for markings on the product that indicate it has asbestos in it, or track the product back to its manufacturer or supplier. If this doesn't work, submit a small sample to a laboratory for analysis. The cost for such analysis is minimal, typically around \$25-\$50/sample. Laboratories are listed in the yellow pages of your telephone book under "Asbestos—Consulting and Testing."



Important: Ask a laboratory technician to instruct you how to safely take a sample.

3. When in doubt, assume there is asbestos.

If you decide not to check for asbestos in a suspected material, you should assume it contains asbestos and take all the necessary precautions to avoid harm to you or your family.

Options for dealing with asbestos in your home

If you have reason to believe your home contains asbestos, you have three options:

1. Leave it alone

Remember, asbestos is a problem only if fibers are released to the air.

Asbestos-containing materials that are in good repair and not being disturbed (i.e., no tears, rips, falling apart or loosening) will not release asbestos fibers. Hence, the safest, easiest, and least-expensive option may be to leave it alone.

If you are planning to remodel, sometimes it is possible to work around asbestos without removing it. For example, rather than removing a sheet vinyl floor with asbestos backing, it may be possible to lay the new sheet vinyl on top of the old, or to install a new ¼-inch plywood underlayment on top of the existing floor and then install the new sheet vinyl.

However, if asbestos-containing material is damaged or must be disturbed *in any way* as part of a remodeling project, then you must repair, encapsulate, or remove it.

2. Repair or encapsulate

Repair

Sometimes, asbestos can be repaired rather than removed. This is basically a process of securely re-sealing asbestos in its location. For example, a few inches of torn, loose, or frayed asbestos tape wrap on heating ducts can be repaired with duct tape. Damaged hot water pipe insulation can be covered with a specially designed fabric available at safety equipment stores.

Encapsulation

Similarly, some asbestos applications that are in good condition can be encapsulated to stabilize them and reduce the likelihood of asbestos fibers releasing into the air. Encapsulation is the best option when dealing with insulation on heating systems. There are two types of encapsulates. *Penetrating encapsulates* are products that seep into asbestos containing materials and bond with asbestos fibers securing them in place. They have little impact on the outward appearance of treated materials. *Bridging encapsulates* are products, such as paint, coat asbestos-containing materials with a more durable surface. They are most commonly used to encapsulate popcorn ceilings and furnace and heat duct insulation.

Be aware, however, that while encapsulation may seem like an attractive option, especially for furnace ducts or popcorn ceilings, there may be less obvious costs and risks involved. For example, painting to encapsulate may make a future removal much more difficult and expensive. Also, popcorn applications that become too heavy with added encapsulated product, or through water damage, may fall off the ceiling in clumps, possibly releasing asbestos fibers.

In cases involving extensive asbestos damage or disturbance, removal may be the more appropriate option.

3. Remove it

Hire an asbestos abatement contractor

If you decide to have asbestos removed, Northwest Clean Air Agency *strongly recommends* you use a state-certified asbestos abatement contractor. These experts have access to specialized removal equipment not available to do-it-yourself homeowners, thereby ensuring asbestos is effectively *and safely* removed. They also perform air monitoring to ensure that the air in your home meets acceptable standards after the project is completed.

Bonded, insured asbestos abatement contractors are in the yellow pages of your telephone book under —Asbestos. A list is also available from the Department of Labor and Industries (<http://www.lni.wa.gov/Safety/Topics/AtoZ/Asbestos/contractorlist.asp>).

Get several bids and check references before making a selection.

Do the work yourself

Homeowners may remove asbestos themselves. But be aware that this option is difficult, time-consuming, and dangerous to your health, if prescribed work procedures are not strictly followed. Some projects, such as the removal of certain types of asbestos insulation on hot water boilers, are very hazardous and should be performed *only* by a state-certified asbestos abatement contractor, for a list of contractors in Washington State, please go to: (<http://www.lni.wa.gov/Safety/Topics/AtoZ/Asbestos/contractorlist.asp>).

Also, if you choose to remove asbestos yourself, you take on the legal liability of ensuring safe disposal of the hazardous debris to avoid health risks to your family and community.

• Before beginning a removal project

Visit the Northwest Clean Air Agency website at www.nwcleanairwa.gov to download and submit a notification form for your asbestos removal project. Once your application is submitted and the appropriate fee is collected, the agency will issue you a case number. Once a case number has been assigned by the agency, the form becomes your permit to legally remove asbestos and dispose of it at specified asbestos disposal sites. For additional information or direction you can call the Northwest Clean Air Agency at 360-428-1617.

Also located on the Agency website (www.nwcleanairwa.gov) are instructional guides on how to properly carry out the removal and dispose of the debris.



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