

An Invisible Killer

Asbestos fibers are more than 1,200 times thinner than a human hair. When released into the air, asbestos cannot be seen and quickly circulates through your home. If inhaled, these fibers become trapped in lung tissues. Extensive medical research has shown that asbestos fibers can cause lung cancer and mesothelioma, a cancer of the tissue that lines the chest cavity. Worse, the fibers linger permanently in the lungs and can trigger these illnesses as much as 30 years after the initial asbestos exposure.

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.

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 sheet vinyl flooring. If asbestos-containing materials are disturbed they may be dangerous to your health.

Despite the on-going prevalence of asbestos in the things around us, there is no safe level of exposure to airborne asbestos. That’s why medical, environmental health, and regulatory organizations stress the need to protect health by minimizing exposure to airborne asbestos fibers. This is particularly true when asbestos fibers accumulate at higher levels. That can often result from improper disturbances and removals of asbestos-containing materials.

When Asbestos Removal is Required

- **Hire an asbestos contractor.** If you decide to have asbestos removed, your safest and most efficient option is to hire a state-certified asbestos abatement contractor. These experts employ removal techniques unavailable to do-it-yourself home owners, 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 directory under “asbestos.” Get several bids and check references before making a selection.
- **Do the work yourself (resident owners of single-family dwellings only).** Many projects can be done safely—if specific work procedures are strictly followed. Some projects are very hazardous and should be performed only by an abatement contractor. It is important for your health and safety that you perform the work correctly. Details on safe and legal asbestos-handling practices can be found at www.swcleanair.org

More Information

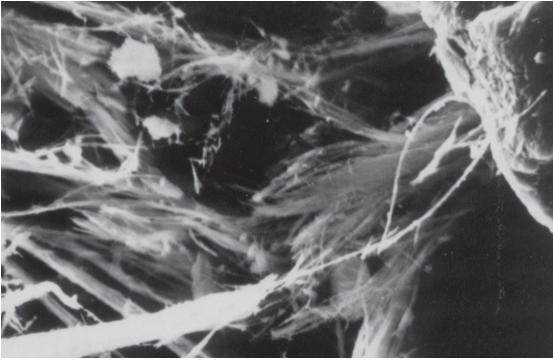
SWCAA can provide you with recommended procedures to follow when taking on a homeowner asbestos project.

Call 360-574-3058 or 1-800-633-0709 or visit www.swcleanair.org



Asbestos In Your Home

Microscopic view of asbestos fibers



- **Heating Systems:** It's common to find asbestos in insulation on old furnaces and boilers, heating ducts, and hot water pipes.
- **Spray-on "Popcorn" Ceilings:** This heavy texture application was a common asbestos-containing ceiling treatment from mid-1960s through the 1980s.
- **Vinyl Flooring:** Sheet vinyl and tiles may contain asbestos. Sheet vinyl can be dangerous to remove because it may be backed with felt containing high concentrations of asbestos.
- **Siding:** Cement asbestos-board siding is a very dense, brittle product used primarily in the 1940s, 1950s and into the 1960s.
- **Miscellaneous:** Additional materials that may contain asbestos include "acoustical" ceiling tiles, plaster, stucco, knob-and-post wire insulation and artificial logs and bricks. More than 3,000 products are known to contain asbestos.

Where You Might Find Asbestos

- **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 remain undisturbed will not release asbestos fibers. The safest, easiest and least expensive option may be to leave it alone. 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.
 - **Repair & encapsulate:** Sometimes, asbestos can be repaired or encapsulated rather than removed. A few inches of torn, loose or frayed asbestos tape wrap on heating ducts can be sealed with paint or duct tape.
- Encapsulation often is the best option when dealing with insulation on heating systems and ceilings.
- There are two types of encapsulants. Penetrating encapsulants seep into asbestos-containing materials and bond with asbestos fibers. They have little impact on the outward appearance of treated materials. Bridging encapsulant products, such as paint, coat asbestos-containing materials with a more durable surface. They are most commonly used on popcorn ceilings and furnace/heat duct insulation. Note that there may be other costs and risks involved. For example, painting may make a future removal more difficult.

When You Find Asbestos

You've confirmed the presence of asbestos. Don't panic. There are some easy (and safe) alternatives to costly and time-consuming asbestos removal:

Before you start a home renovation project, you are required to find out if there is asbestos present in your worksite. The first step is to look for asbestos markings on the product you are replacing/repairing. If this approach doesn't work, submit a small sample for laboratory analysis. Cost is minimal. Laboratories are listed in the yellow pages under "Asbestos-Consulting and Testing." Ask a laboratory technician to instruct you how to safely take a sample. If you decide not to check for asbestos in a suspect material, you must assume it contains asbestos and treat it accordingly.

Identify the Asbestos

SWCAA at 360-574-3058. requirements of asbestos removal. You can reach

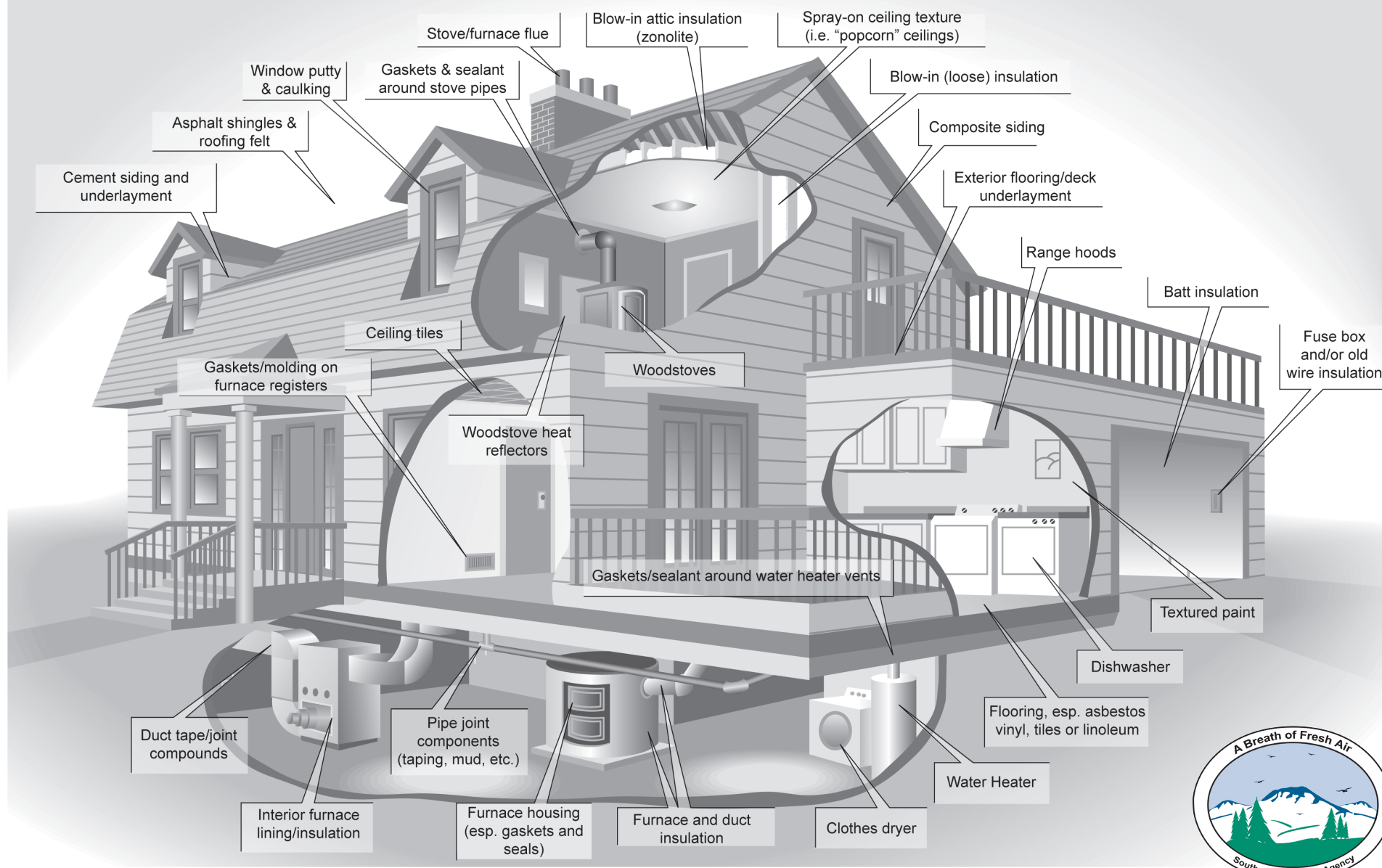
Before you Act, CALL

Asbestos removal is difficult, time consuming and dangerous if done improperly. Before any work is done, please contact the Southwest Clean Air Agency (SWCAA) to get the latest information on safety practices and legal requirements of asbestos removal. You can reach SWCAA at 360-574-3058.

The growing popularity of do-it-yourself home repairs and renovations has increased the possibilities of asbestos exposures. If you own and reside in a single-family home, you are allowed to do your own asbestos removal during home renovation projects, but the process is not easy, nor inexpensive. Many remodelers find that hiring a qualified asbestos-removal company is the better option. Homeowners who do decide to tackle the asbestos removal job themselves must be prepared for the task.

Minimize the Dangers

Possible Locations of Asbestos in Your Home



Asbestos may be present in several locations in your home, but it is not a cause for concern as long as it is maintained in an undamaged state. The graphic above shows some of the more common areas in which asbestos may have been used in your home so that you will be aware of its presence should you need to repair or replace any of the items listed. If any of the items that might contain asbestos are broken or damaged, treat it as if you know it DOES contain asbestos until you can prove otherwise.

Asbestos Removal Practices

- Before beginning an asbestos project, you must submit a notification to SWCAA. Call 360-574-3058 or 1-800-633-0709.
- Make sure that the asbestos-containing material is thoroughly wet to keep fibers from getting airborne.
- Plastic sheeting needs to be placed on the floor, up walls and over storage areas to ensure that asbestos ends up on the plastic and nowhere else.
- Use 6-mil (or stronger) plastic bags for disposing of debris or it must be sealed in leak-tight containers.
- Everyone working on the project must wear an asbestos-rated respirator, disposable coveralls, goggles, disposable gloves, and rubber boots.

Known Health Issues Linked to Asbestos Exposure

- *Chronic (long-term) inhalation exposure to asbestos in humans can lead to asbestosis, a lung disease characterized by a diffuse fibrous scarring of the lungs.*
- *Inhalation of asbestos fibers can cause a form of lung cancer known as mesothelioma (also called “asbestos cancer”).*
- *Individuals who smoke and are also exposed to asbestos have a greatly increased risk of developing lung cancer.*
- *An increased risk for gastrointestinal cancer has been linked to asbestos exposure (through inhalation and oral ingestion).*
- *EPA considers asbestos to be a human carcinogen (cancer-causing agent).*

—Source: EPA’s Office of Air Quality Planning and Standards

Frequently Asked Questions About Asbestos

1. What is asbestos?

Asbestos is a group of naturally occurring minerals commonly used as an acoustic insulator, thermal insulation, fire proofing and in other building materials. Asbestos fibers are incredibly strong and heat resistant.

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.

3. When is asbestos a hazard?

Asbestos is not always an immediate hazard. In fact, if asbestos-containing materials can be maintained in good condition, it is recommended that they be left undisturbed, with periodic monitoring to ensure it remains in good condition. It’s only when asbestos-containing materials are disturbed or the materials become damaged that they becomes hazardous.

4. How are asbestos-containing materials maintained?

Encapsulation involves applying a thick layer of an encapsulant, much like latex paint, that binds the surface of the material together to prevent the material from becoming airborne.

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, or when the building is to be demolished or renovated, that proper removal may become the only option.

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

Federal regulations require all non-tested material to be presumed to contain asbestos. Any building owner who is renovating or demolishing a building is required by federal law to have their buildings surveyed for asbestos-containing materials. Legally, homeowners can remove asbestos from spaces they own and occupy, however SWCAA strongly recommends hiring a certified professional. Removing asbestos requires special equipment and detailed training. More importantly, without proper equipment and training, an individual could cause asbestos fiber contamination throughout your home and neighborhood.

7. How is asbestos removed?

Workers removing asbestos must first seal all possible entries and exits to prevent asbestos from escaping into the air. Work areas are maintained under negative pressure and the air is exhausted through special filters that make sure the exhausted air is safe. Homeowners working on do-it-yourself renovations must follow the same practices—see www.swcleanair.org for more details on these practices.

8. Where does asbestos go after it is removed?

After removal, the sealed bags must be transported to, and disposed of at, an EPA-approved landfill.

9. How can I tell if my building contains asbestos?

The only way to tell if a building material contains asbestos is to contact a certified laboratory. Materials containing less than one percent asbestos are not regulated.

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

Contact the Southwest Clean Air Agency, 11815 NE 99th Street, Suite 1294, Vancouver, WA 98682; 360-574-3058; www.swcleanair.org