ASBESTOS GUIDE

FREQUENTLY ASKED QUESTIONS ABOUT ASBESTOS



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WHAT IS ASBESTOS?

Asbestos is a **naturally occurring toxic mineral** known for its remarkable
strength and resistance to heat.





Manufacturers have added asbestos

to thousands of products to help with
insulation and fireproofing.

found in construction

materials used to build

many older homes and

public buildings,

including:

Ceiling and Floor Tiles



WHAT CAN I DO ABOUT ASBESTOS IN MY HOME?



If you think there is asbestos in your home, don't touch it.

If the material is in good condition and will not be

disturbed, the best option is usually to leave it in place.



If the material appears damaged or future activities could disturb it, contact a trained and accredited asbestos professional. Limit access to the area until a professional can confirm the presence of asbestos.

I MAY HAVE BEEN EXPOSED TO ASBESTOS. HOW DO I GET TESTED?

If you are concerned about a possible exposure to asbestos, start by talking to your primary care physician.





While no test can detect
asbestos fibers in your lungs,
your doctor can order imaging
scans that reveal signs of
asbestos-related disease.

I WAS EXPOSED TO ASBESTOS, BUT MY TESTS CAME BACK NEGATIVE. WHAT CAN I DO?

Asbestos-related conditions are difficult to detect, and not all primary care doctors have the tools and experience to diagnose them.

a second opinion from a qualified lung specialist, such as an occupational pulmonologist. Even if further tests come back negative, monitor your symptoms and get re-tested annually.





Most asbestos-related diseases are diagnosed at least 15 years after exposure.

WHAT HAPPENS IF I VIOLATE ASBESTOS LAWS?

Any activity involving asbestos
must follow U.S. Environmental
Protection Agency regulations,
as well as any state asbestos
laws. Some asbestos violations
result in written warnings.





Others can bring criminal charges, prison time or daily civil penalties as high as \$25,000 for each violation, depending on the severity of the infraction.

HOW CAN I TELL IF A MATERIAL IN MY HOME CONTAINS ASBESTOS?



It's extremely difficult to identify asbestos just by looking at it, so you need to have samples sent to a lab for testing.



It's legal for homeowners to collect samples and have them tested, but it's much safer for you and your family to hire a trained asbestos professional for the job.



Search for "asbestos inspection" online or in the phone book to find a licensed expert. The U.S. Department of

Commerce offers a <u>list of accredited</u>

asbestos laboratories online.

HOW CAN I TELL IF A MATERIAL IN MY HOME CONTAINS ASBESTOS? (CONT.)



A. Exterior Surfaces

- 1. Roof Felt and Shingles
- 2. Window Putty
- 3. Cement Abestos Board Siding/ Undersheeting

B. Insulation

- 1. Vermiculite Insulation
- 2. Batt Insulation

C. Flooring

1. Vinyl Asbestos Floor Tile

D. Interior Surfaces

- 1. Popcorn/Sprayed-on Ceilings
- 2. Textured Paint

E. Boilers, Heating & Piping

- 1. Heat Source Covering
- 2. Door Gaskets
- 3. Duct Linings
- 4. Wall Gaskets and Linings

Electrical Equipment

- 1. Recessed Lighting
- 2. Wiring Insulation
- 3. Fuse Boxes
- 4. Outlets

G. Appliances

- 1. Refrigerators/Freezers
- 2. Range Hoods
- 3. Woodstoves (Heat Reflectors)
- 4. Clothes Dryers

Not Shown: Dishwasters, Toasters, Slow-cookers, Portable Heaters, Hair Dryers

H. Miscellaneous

1. Fireplace Logs

J. Automotive

1. Brake Linings, Gaskets and Clutch Facings

HOW MUCH DOES ASBESTOS TESTING COST?

You can hire a professional to inspect your home and collect samples, or you can do it yourself with a test kit from your local hardware store. The cost of asbestos testing varies depending on the number of samples tested and the methods used.



The most popular testing method, Polarized
Light Microscopy (PLM), can range from \$20
to \$100 per sample. Some labs use
Transmission Electron Microscopy (TEM),
which is more expensive. DIY test kits require
you to mail samples to an accredited lab, which
may charge an additional fee for analysis
(typically around \$40).



Collecting samples yourself can create exposure risks, so hiring a certified professional is the safest choice for your and your family. The total cost of labor can run between \$ 350 and \$600 - a small price to pay for peace of mind that the job will be completed safely.

What Is Asbestos?

Asbestos is any of several naturally occurring minerals composed of long, thin crystal fibers. The material has many desirable qualities, including impressive

resistance to heat, flame, electricity and chemicals. Because of these properties, a wide range of industries used asbestos to strengthen, insulate and fireproof their products.

Around the late 1800s, manufacturers began adding asbestos to industrial, construction and household products. The material became a common ingredient in cement, bricks, roofing materials, pipe coatings, heating system insulation, gaskets, brake pads and thousands of other products.

In the decades that followed, health experts found increasing evidence that breathing airborne asbestos can cause a variety of serious lung conditions, including several cancers. While many uses for asbestos were phased out, it remains legal in the U.S. for more than a dozen applications.



Cement



Bricks



Roofing Materials



Pipe Coatings



Heating System Insulation



Brake Pads

Asbestos-Related Health Risks

Studies have linked more than a dozen diseases to asbestos exposure. Several of these conditions, such as mesothelioma, asbestosis and lung cancer, have a confirmed relationship with the toxic mineral. Others, such as COPD and kidney cancer, are not directly caused by asbestos, but researchers suspect exposure can increase a person's risk for developing them. The risk for lung cancer is especially high for smokers who are exposed to asbestos.



Today, asbestos remains in many homes built between 1930 and the late 1970s, and in approximately 132,000 primary and secondary schools across the country. When asbestos hazards aren't handled properly, building renovations, demolitions and simple home repairs can lead to serious health risks.

How Does Asbestos Exposure Occur?

Asbestos exposure often happens when people disturb asbestos-containing products with activities like sawing, sanding, drilling or scraping. Asbestos-containing materials pose minimal health risks when in good condition, but they can release toxic fibers into the air when they start to deteriorate or become damaged.

Breathing or swallowing airborne asbestos won't cause any immediate harm, but microscopic asbestos fibers tend to build up in the lungs and cause inflammation and scarring over time. It can take decades — typically between 20 and 50 years — for diseases like asbestosis, lung cancer and mesothelioma to arise after the first exposure to asbestos. The likelihood of a person developing an asbestos-related disease varies depending on the duration and intensity of exposure.

How to Spot Asbestos in the Home

If your home was built between 1930 and 1977, there's a good chance it contains asbestos materials in one or more locations. Asbestos insulation was highly common between 1930 and 1950. From the 1920s to 1990, a brownish-gold colored wall and attic insulation called vermiculite was often contaminated with asbestos. The diagram to the right shows many areas where asbestos products can be found around the home.

Click to Enlarge





Vinyl
Asbestos Floor
Tiles



Asbestos
Contaminated
Vermiculite



Asbestos Roof Tiles



Asbestos
Cement Wall
Siding

Unless a product or material is clearly labeled — and few were — there's no way to tell whether or not it contains asbestos just by looking at it. If you think a product in your home contains asbestos, the U.S. Environmental Protection Agency (EPA) suggests you treat it as if it does, and leave it alone.

Testing for Asbestos

The only way to confirm the presence of asbestos in a material is to have it tested at a certified laboratory. For the safety of you and your family, only a qualified professional should collect samples for analysis. The EPA only recommends testing a material for asbestos if it is damaged or could be disturbed by renovations or other activities.

It is crucial you find out if asbestos is present before you perform maintenance or have your house remodeled. Don't touch any potential asbestos materials, but be sure to look for any wear and tear or water damage. If you find asbestos materials in poor condition, or if you plan to make changes to your home that may disturb them, you will need to hire an asbestos professional to have it concealed or safely removed.



Various household asbestos products, including asbestos cement pipe, a corrugated asbestos panel and asbestos terrazzo floor.

Avoiding Harmful Exposures

The best way to avoid asbestos exposure is to be knowledgeable about the asbestos materials in your home, including their locations and current condition. Limit any activities in areas with asbestos — especially if the materials are falling apart.

Asbestos Safety Do's and Don'ts

If you own an older home, take every precaution to avoid damaging materials that may contain asbestos. Even if a repair seems minor, you should hire a professional if asbestos may be present. Improper handling of safely managed asbestos can create an exposure risk where there was none before.

Do:

- Avoid any contact with dangerous asbestos materials.
- Talk to your home inspector or real estate agent about any known asbestos risks in your home.
- Take every precaution not to damage any materials that may contain asbestos.
- Only hire trained professionals for asbestos inspections, testing, repairs or removal.

Don't:

- **X** Don't saw, sand, scrape, drill or disturb materials that may contain asbestos.
- **X** Don't sweep, vacuum or dust debris that may contain asbestos.
- Don't collect asbestos samples for testing without proper training.
- **X** Don't perform any work on or near asbestos materials unless you're trained and certified.
- **X** Don't remove asbestos unless repair or concealment is impossible, and there's a high risk for exposure.
- **X** Don't dispose of asbestos materials with normal household waste.

Common Exposure Scenarios



While remodeling the attic of his 1960s home, John found piles of brown pebble-like insulation. He decided to replace the existing insulation with new fiberglass insulation to save money in the winter months. He scooped the loose insulation into some garbage

bags and installed the new material.

How John was exposed: John had no idea that his attic was insulated with vermiculite, which was contaminated with asbestos for decades. By disturbing the material, he spread airborne asbestos fibers. John should have left the insulation alone and had it tested for asbestos before disturbing it.



Ralph is an aspiring gearhead who loves working on his 1965 Corvette Stingray. When his brakes started to squeal, Ralph wanted to try replacing them in his own garage. After removing the rear

tires, however, he saw the brake drums were covered in dust. To clean them off, he banged the sides with a hammer and blew the dust away with an air compressor.

How Ralph was exposed: Because some brake components contain asbestos, spraying them with compressed air can release toxic fibers into the air. Ralph should have taken his car to the shop for service, or wiped down the brake drums gently with a wet cloth.

Common Exposure Scenarios (Cont.)



Erica recently won a painting at a silent auction and couldn't wait to bring it home and hang it in her living room. She measured carefully and used a drill to install drywall anchors to keep the painting in

place. The painting wasn't level, however, so she had to drill a few more holes before it hung perfectly.

How Erica was exposed: Erica had no idea that her home was built with asbestos-containing drywall. When she drilled through the wall to hang her painting, asbestos fibers from the drywall escaped into her living room. Erica should have known about the asbestos in her walls and left it alone.



Herman just purchased a 1950s fixer-upper in his home town, and his first project was upgrading the master bathroom. He decided to start by removing the hideous vinyl floor tile. He removed the

existing tiles with a scraper and installed the new tile when he was done.

How Herman was exposed: Asbestos was a common ingredient in vinyl floor tiles in the 1950s. Using a scraper to remove the old flooring can release dangerous asbestos fibers. Herman should have left the old tiles alone and installed the new tile over it.

Common Exposure Scenarios (Cont.)



Janine was tired of the popcorn texture on the ceilings in her home, so she decided to scrape it off and repaint with a smooth finish. After putting on eye protection and a dust mask, she

grabbed her ladder and got to work. After lots of scraping, a little sanding and some careful painting, she was finally done.

How Janine was exposed: Many textured ceiling finishes, including popcorn ceilings, have concealed asbestos. Scraping off the popcorn finish released microscopic asbestos fibers that easily passed through Janine1 s dust mask. She should have hired a professional trained in safely removing asbestos hazards.



When fixing up the basement of his late-1800s Victorian home, Brent noticed that the insulation around some of the hot water pipes was starting to deteriorate. Not wanting to lose any heat

efficiency, he cut away the old insulation with a utility knife and replaced it with new fiberglass insulation.

How Brent was exposed: Brent should have known that many older plumbing systems are wrapped in asbestos insulation. The insulation may have already posed an exposure risk before he started the project, but cutting away the damaged material released even more fibers into the air. Brent should have hired an asbestos professional to seal the asbestos insulation.

Exposed to Asbestos? Get Tested!

If you think you were exposed to asbestos, don't panic. There are <u>several proactive steps you can take</u> to protect your health. Not everyone who breathes airborne asbestos develops an asbestos-related disease. If you experienced a brief, one-time exposure, your risk for cancer or another asbestos-related condition is small.



Keep in mind that it can take a long time for asbestos-related diseases to develop. Most people don't experience any signs or symptoms until 15 or more years after exposure. Mesothelioma and lung cancer typically take between 20 and 50 years to develop.

What if you've been exposed to asbestos but don't have any symptoms?

Start by scheduling an appointment with your primary care doctor. Be ready to discuss any past exposures to asbestos, including where, when and for how long you were exposed. No test can detect asbestos fibers in the lungs, but your doctor can order a chest X-ray or another imaging scan to reveal signs of asbestos-related disease.

If the tests show you are healthy, you need to monitor your health moving forward. Meet with your doctor every year to discuss your exposure, and find out if more testing is needed. See your doctor immediately if you start experiencing any new symptoms, such as shortness of breath, chest pain or a dry cough.

What if you've been exposed to asbestos and have symptoms?

Go straight to an <u>asbestos-related disease specialist</u>. Specialists understand the intricacies of asbestos conditions that other physicians often miss. Seeing a specialist increases the odds of an early diagnosis and prompt treatment, which are crucial for extending the life expectancy of cancer patients.

How to Manage Asbestos Risks

When you find a material in your home that may contain asbestos, the safest course of action is to leave it alone and call a professional. Asbestos professionals are trained and certified to manage asbestos risks safely. They can inspect your home, test materials for asbestos and advise you on how to deal with existing asbestos in your home.

There are several ways professionals can manage asbestos, including:



No action: Leave low-risk asbestos in place and check its condition periodically.



Maintenance: Perform minor repairs or activities that could result in exposure.



Encapsulation: Enclose asbestos materials with spray sealant.



Enclosure: Build a permanent air-tight barrier around the material.



Abatement: Remove asbestos from the home.

If the asbestos is still in good condition and you have no plans for activities that might disturb it, most experts will advise you to leave it in place. In many cases, removing low-risk asbestos materials is more dangerous than managing them in place.

When hiring an asbestos professional, research is key. Get cost estimates from several companies. Look for experienced professionals who are trained and certified for asbestos work. Before hiring a company, ask for references from past clients.

For the most up-to-date listings of accredited asbestos professionals in your area, call or email your state's asbestos contact.

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