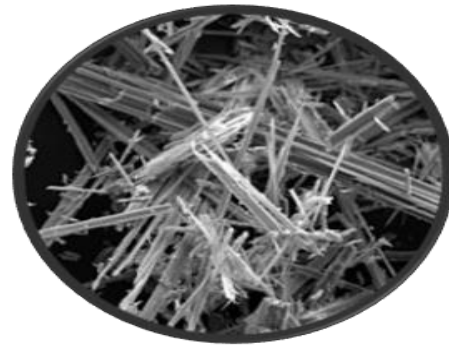


Asbestos Awareness



Environmental Health and Safety



UNH Policy

- Asbestos will not be harmful if it is fully intact and in good condition. It is when the material is broken or crumbled that you risk releasing the dangerous fibers into the air.
- Unsampled materials in buildings built prior to 1981 are presumed to contain asbestos until sampling and analysis indicates otherwise.
- The UNH Facilities Department maintains an asbestos containment compound that prevents the release of asbestos fibers in the air.
- If you notice any damaged building materials do not further disturb, damage or otherwise handle the suspected asbestos material and immediately contact your manager.
- Asbestos must be abated by an approved abatement contractor following a 10-working day notification to the CT DPH.

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Objectives

- Define what asbestos is
- Describe where asbestos is found
- Explain associated health hazards
- Illustrate how to protect yourself and co-workers against asbestos hazards

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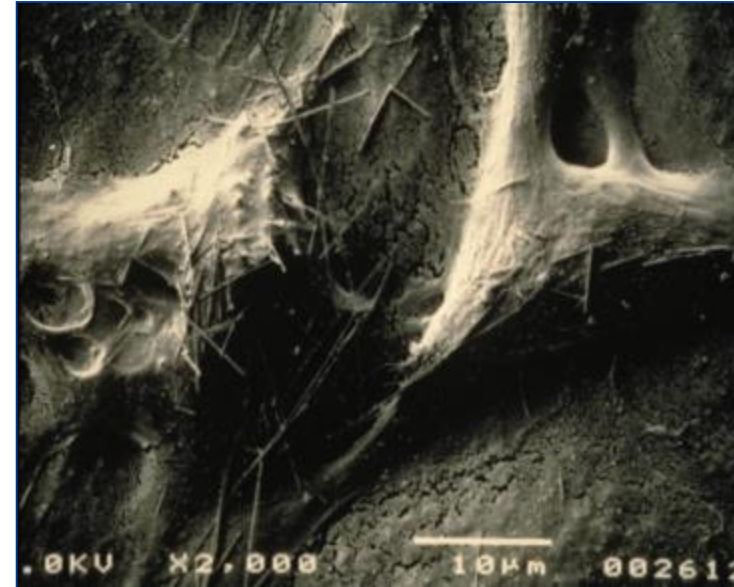
What Is Asbestos

- The word "asbestos" comes from the Greek meaning "inextinguishable."
- Asbestos is a serious health hazard commonly found in our environment today.
- Employees who may work in buildings that contain asbestos should know where it is found and how to avoid exposure.

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Asbestos Fibrous Minerals



Serpentine (93% of commercial use)	Amphibole (7% of commercial use)
Chrysotile	Actinolite, Amosite, Anthophyllite, Crocidolite, Richterite, Tremolite

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Asbestos Fiber Facts

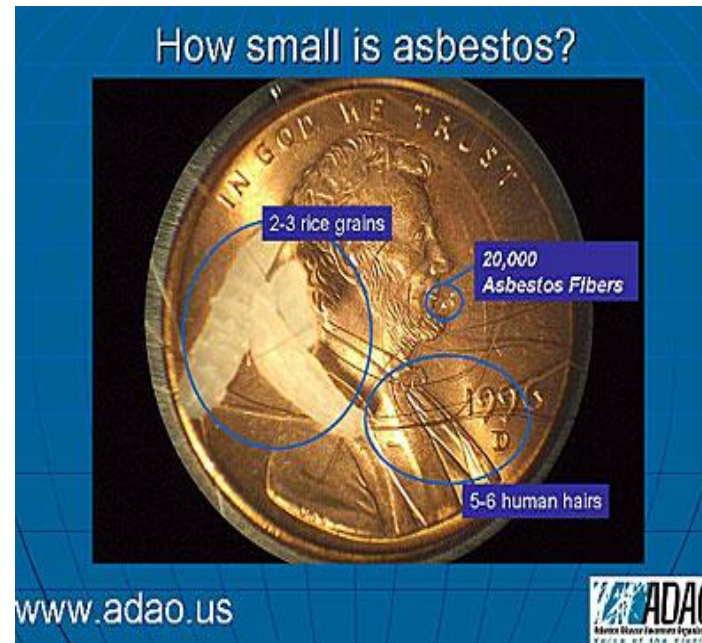
- All types of asbestos tend to break into very tiny fibers.
- These individual fibers are so small they must be identified using a microscope.
- Some fibers may be up to 700 times smaller than a human hair.
- Because asbestos fibers are so small, once released into the air, they may stay suspended there for hours or even days.
- Resistant to chemicals and heat, and they are very stable in the environment.



Asbestos Facts

Usually asbestos is mixed with other materials to actually form the products. Floor tiles, for example, may contain only a small percentage of asbestos.

Depending on what the product is, the amount of asbestos in asbestos containing materials (ACM) may vary from 1%-100%.



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Asbestos Exposure

1.3 million workers are exposed in the U.S. – primarily in the construction industry.

Asbestos removal and building renovation & demolition have the greatest exposures.



Exposure in general industry:

- Manufacture of asbestos products
- Automotive brake and clutch repair
- Housekeeping and custodial work

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Materials Containing Asbestos at the University

- Pipe insulation/covering
- Ceiling tiles
- Flooring tiles
- Wall coatings
- Boiler components
- Brake linings and clutch pads
- Electrical, Mechanical Products
- Adhesives, Cements, Mortar, Sealers

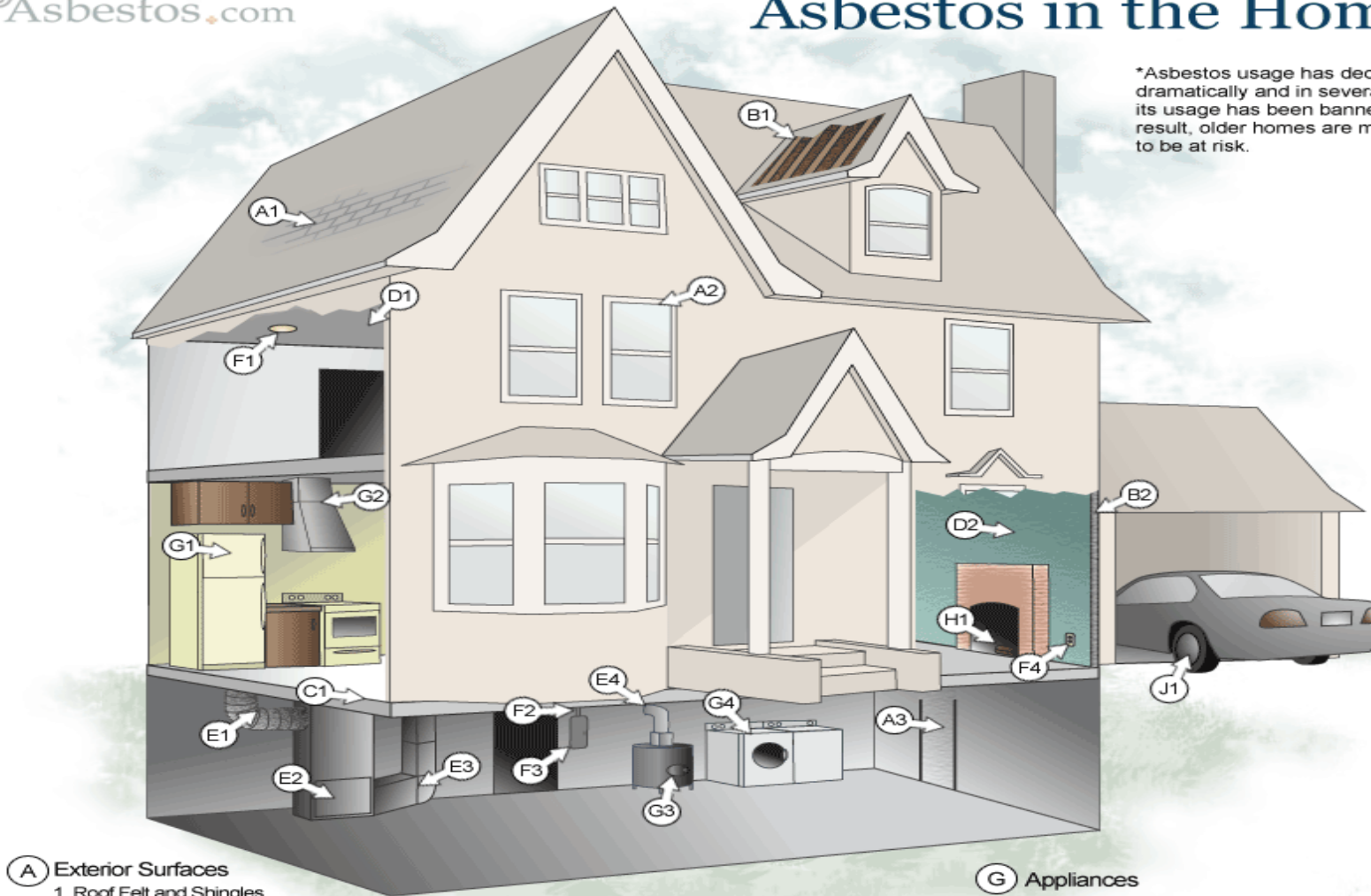


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Asbestos in the Home

*Asbestos usage has declined dramatically and in several cases, its usage has been banned. As a result, older homes are more likely to be at risk.



(A) Exterior Surfaces

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

(B) Insulation

1. Vermiculite Insulation
2. Batt Insulation

(C) Flooring

1. Vinyl Asbestos Flooring Material

(D) Interior Surfaces

1. Sprayed-on Ceiling Material
2. Textured Paint

(E) Boilers, Heating and Piping

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

(F) 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: Dishwashers, Toasters, Slow-cookers, Portable Heaters, Hair Dryers

(H) Miscellaneous

1. Fireplace Logs

(J) Automotive

1. Brake Linings, Gaskets, and Clutch Facings

Asbestos Occupations

Just to name a few:

- Plumbers
- Demolition
- Construction / remodeling
- Roofers
- Mechanics
- First Responders



<http://www.mesothelioma.com/asbestos-exposure/occupations/>

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Health Affects of Asbestos Exposure

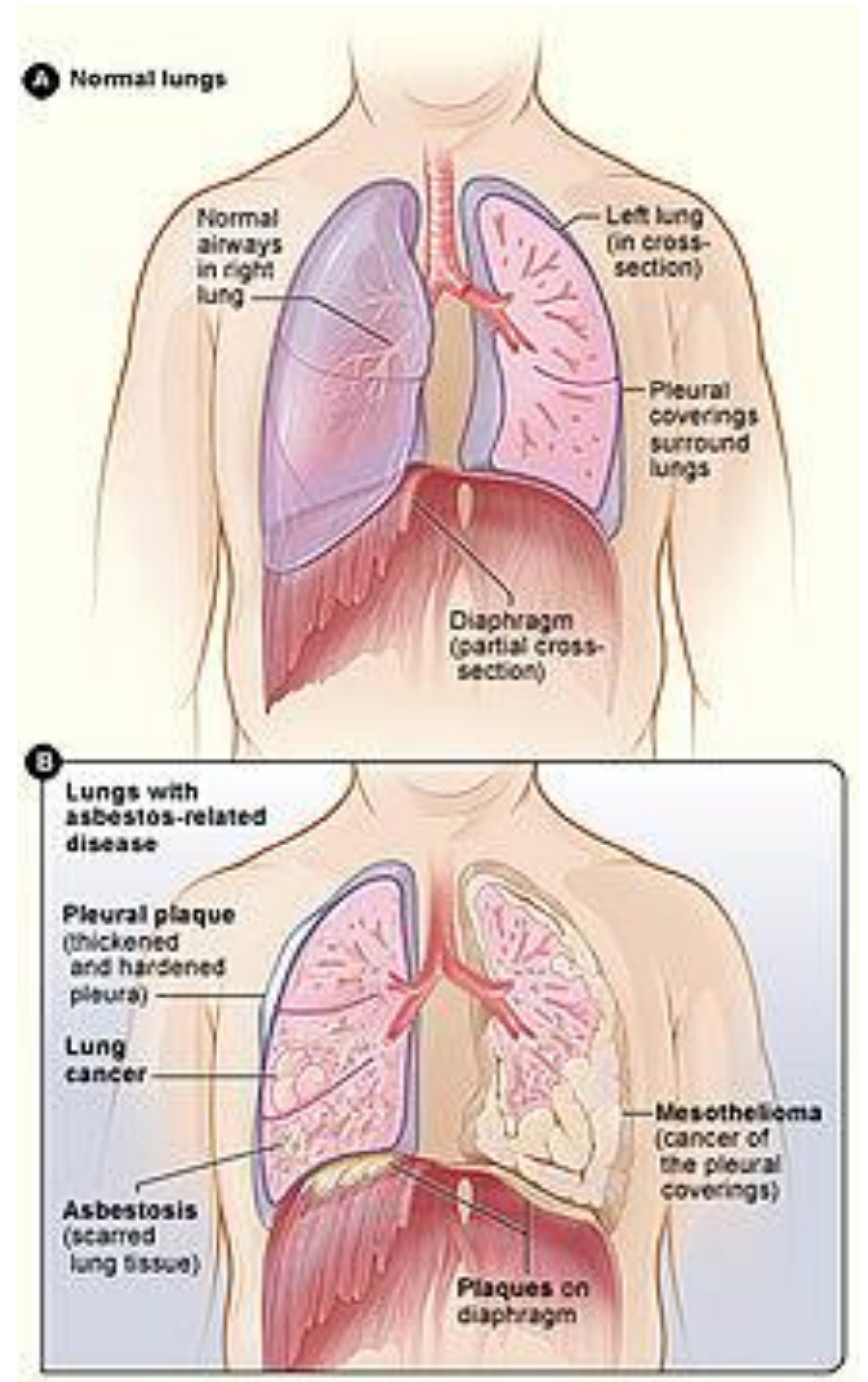
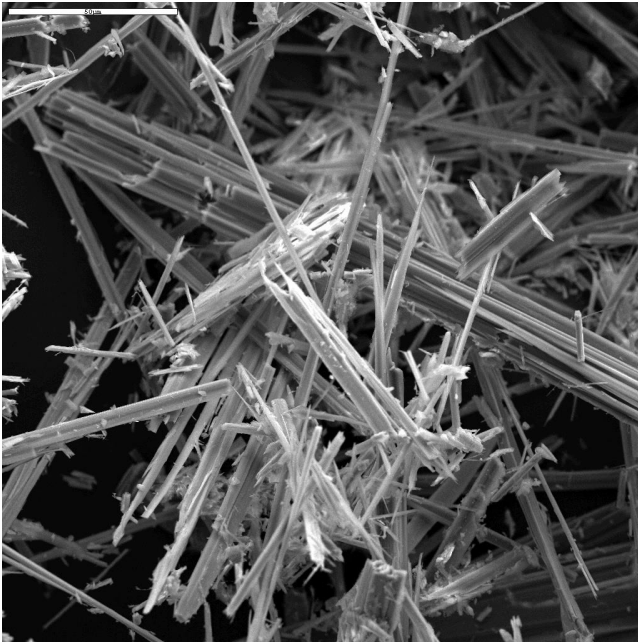
- Asbestos exposure is the only confirmed cause of mesothelioma, a fatal form of cancer that typically manifests in the lungs
- Lung Cancer
- Asbestosis

Effects are chronic, it could take 20 years for one asbestos fiber to turn into one of these deadly diseases

Therefore, always protect yourself if you suspect asbestos.

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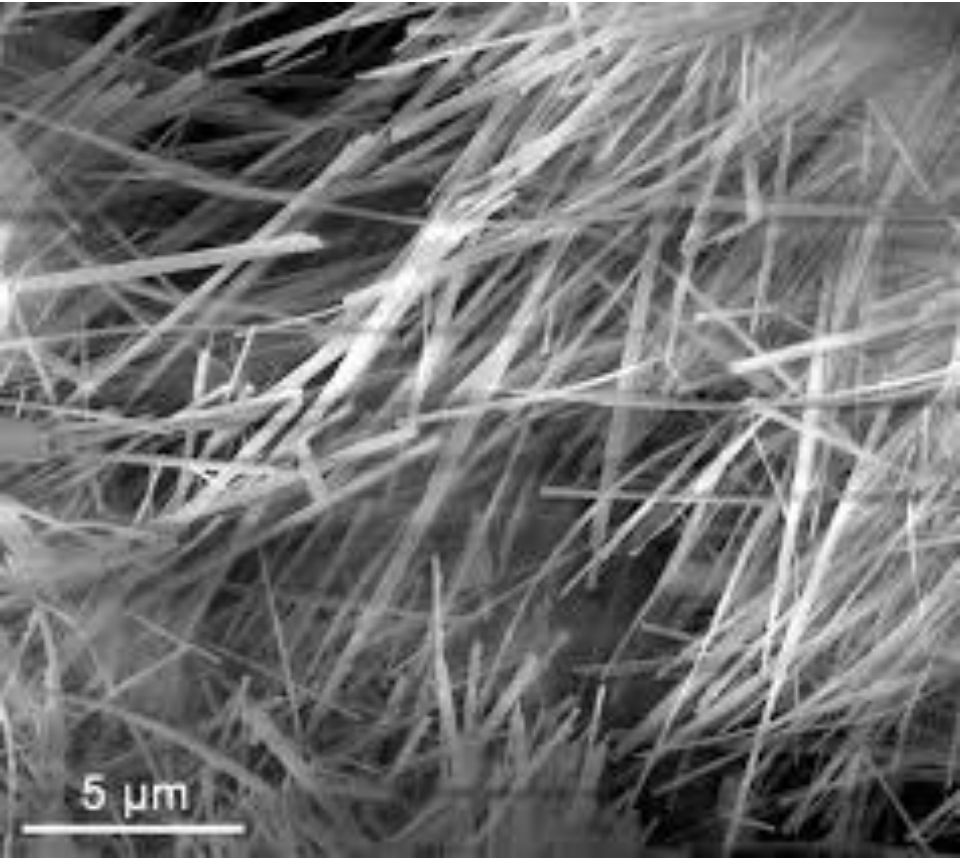
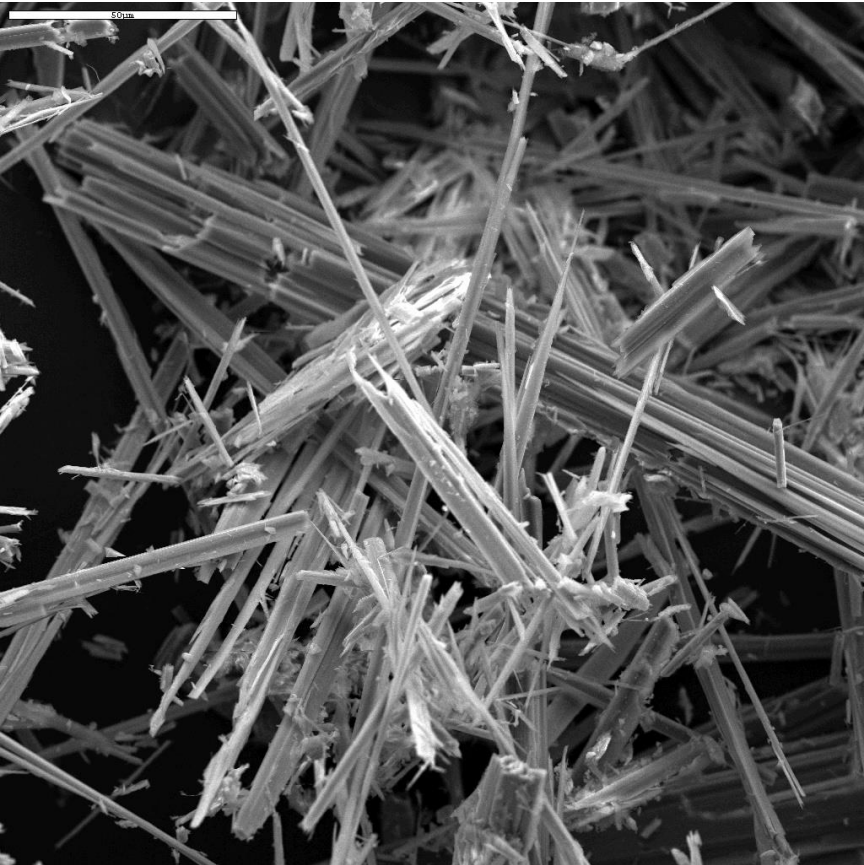




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Asbestos vs. Fiber Glass



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Asbestosis Can Include:

- Shortness of breath is the primary symptom
- A persistent and productive cough (a cough that expels mucus)
- Chest tightness
- Chest pain
- Loss of appetite
- A dry, crackling sound in the lungs while inhaling

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Cigarette Smoke and Asbestos

- Cigarette smoke and asbestos together will increase your chances of getting lung cancer.
- If you have been exposed to asbestos you should stop smoking.
- This may be the most important action that you can take to improve your health and decrease your risk of cancer.



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Identifying Asbestos-Containing Tile

- Typically, you can make a fairly accurate guess if your building is older than 1980 (especially between the years **1920-1960**) that has the original floor and your tiles are **9” x 9”** or **12” x 12”**.
- Many of these tiles tend to be **black, brown, gray** or some combination of the three due to the asphalt binder.

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Cleaning Vinyl Asbestos Tile

Stripping and Finishing: OSHA and EPA offer the following guidance:

- When stripping of floors becomes necessary, the machine used for stripping the finish should use the least aggressive pad as possible.
- The machine used for stripping should be run at a low rate of speed, 175 -300 rpm.
- Never perform dry stripping. Always strip floors while wet. Do not operate a floor machine with an abrasive pad on unfinished flooring that may contain asbestos.
- After Stripping, the floor should be thoroughly cleaned while wet.
- Finishing: Use of a Sealer followed by a high solids finish.
- Protection: Use of protective chair glides is recommended to avoid gauging or scratching a floor which could result in unintended release of asbestos fibers.

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Hazard Communication Signage



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Questions?

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