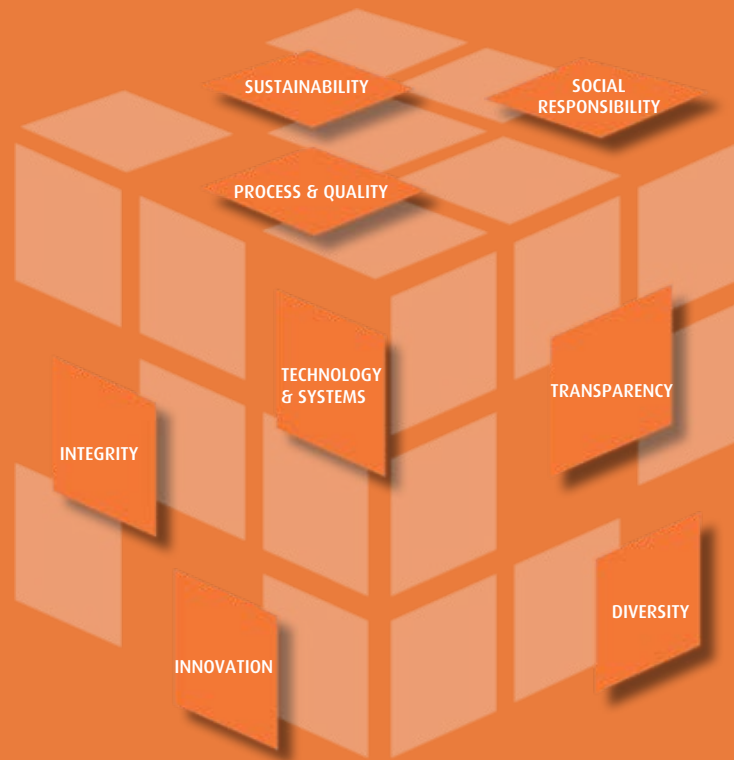


Asbestos Awareness





This module covers the topic of Asbestos Awareness.

There is also a short Final Quiz, in addition to this module, which will be scored. It is necessary to pass with a score of 80% or better to receive credit for this module.

This module takes 20 minutes to complete.

Asbestos is a serious health hazard commonly found in our environment. This module is designed to provide an overview of asbestos and its associated hazards.

It is important for employees who may work in buildings that contain asbestos to know where it is likely to be found and how to avoid exposure.



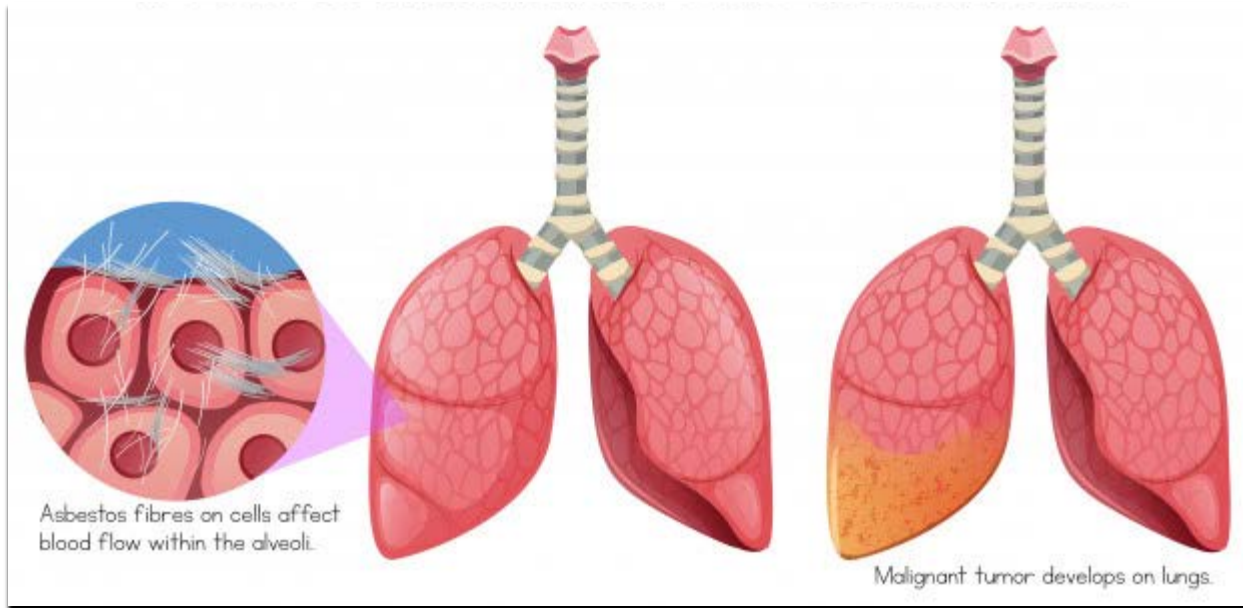
- A naturally occurring mineral
- Principally mined in Canada and S. Africa
- Added to building materials because of its good insulating, strength, sound-proofing, fireproofing and corrosion-resistance properties

- 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.
- Can remain suspended in the air for up to three days.
- Tiles will be stained or oily in appearance over time because the asphalt degrades causing grimy or discolored spots.



Asbestos Siding

- Inhalation is most common and damaging pathway into the body
- Asbestos-related diseases show dose- response relationship
- Diseases are treatable but not curable



Process of mesothelioma caused by asbestos

Mesothelioma – rare cancer of chest lining

- Symptoms: shortness of breath, chest pain, fluid in chest cavity
- Prognosis: generally quick (1 year after diagnosis), painful death
- Long latency: 30 years or more
- Dose-response not as clear, but asbestos is the only cause

Lung Cancer

- Symptoms: persistent cough, chest pain, wheezing, labored breathing
- Prognosis: slow, painful death
- Smoking increases risk 50 to 90-fold
- Long Latency: 20 to 30 years

High levels & long term exposure increase risk but there's no "safe level" of exposure

Asbestosis – fibrotic scarring of the lungs, not a cancer

- Symptoms – shortness of breath, rales, clubbing of fingers, chest pain, loss of appetite
- Prognosis – can be fatal, increases susceptibility to other heart/lung problems
- Long latency – 15 to 30 years
- Common to workers with high exposure over many years

Asbestos is most hazardous when it is **friable**.

- "friable" = easily crumbled by hand, releasing fibers into the air.
- Asbestos-containing ceiling tiles, floor tiles, undamaged laboratory cabinet tops, shingles, fire doors, siding shingles, etc. **will not release asbestos fibers** unless they are disturbed or damaged in some way.
- If an asbestos ceiling tile is drilled or broken, it may release fibers into the air. If it is left alone and not disturbed, it will not.
- Damage and deterioration will increase the friability of asbestos-containing materials. Water damage, continual vibration, aging, and physical impact such as drilling, grinding, buffing, cutting, sawing, or striking can break the materials down making fiber release more likely.

ACBMs may be found in many building materials. Examples are:

- Sprayed-on fire proofing and insulation in buildings
- Insulation for pipes and boilers
- Wall and ceiling insulation
- Ceiling tiles
- Floor tiles
- Putties, caulks, and cements (such as in chemical carrying cement pipes)





Surfacing Material

- Condensation control
- Acoustical insulation
- Decoration
- Fireproofing
- Sprayed-on or troweled-on

ACBMs are found in schools, and is most likely found in:

- Sprayed-on insulation in locations such as various mechanical rooms, steel reinforcing beams, and some ceilings in older buildings
- Ceiling tiles in buildings built prior to 1981
- Most 9" floor tiles in buildings built prior to 1981
- A few 12" floor tiles in buildings built prior to 1981
- Insulation around pipes and boilers, and Interiors of fire doors

Asbestos may be found in many different building materials.

Examples of materials that might contain asbestos are:

- Roofing shingles
- Siding shingles on old residential buildings
- Wall and ceiling texture in older buildings and homes
- Joint compound in older buildings and homes
- Brake linings and clutch pads



- Buildings, pipes, and boilers that have “identified” asbestos-containing materials in them will have notices posted near the main entrances, frequently near the fire alarm panel.



- Asbestos-containing ceiling tiles will not be labeled or marked.
- These tiles cannot be differentiated from other tile by visual means - they must be analyzed by a laboratory test.

To all Managers: it is imperative to find out if ACBM is in a new client's location **BEFORE** performing any floor work or construction!!

What should I know about cleaning floors with ACBM?

- Remember that ACBM is only hazardous if fibers are released from materials
- No sanding permitted
- Strip floors as infrequently as possible
- Use low abrasion pads when stripping at speeds lower than 300 RPM and ensure floor is wet
- After stripping, clean wet floor with a Wet-Vac
- Apply 2-3 coats of sealer prior to applying a finished coat
- When dry-burnishing floors, operate the floor machine at low speeds between 1200-1750 RPMs) and use the least abrasive pad as possible
- When dry mopping, a petroleum-based mop treatment is not allowed

- Look for holes, rips, water stains, abrasion
- Contact your Supervisor
- Notify the Client point of contact
- Remember the asbestos fibers are invisible without microscope
- Need to know where the asbestos is and always respond to any visible damage as though there has been a release

Congratulations! You've completed the
Asbestos Awareness module!

Please click [here](#) to take the quiz.