



MAFES Dawg Tracks

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Safety Tips: Handling Asbestos Carefully

Asbestos has been around for a long time. It is a naturally occurring fibrous material. It has been used in buildings beginning in the 1950s through the late 1990s. Actually, it is still found in many buildings, including homes, businesses, schools and hospitals.

Deposits of asbestos are found throughout the world. The primary sites of commercial production are Canada, Soviet Union and South Africa. The USA, at one time, was the major commercial source.

There is approximately 3,000 products where asbestos is used. Besides building materials, it is used in various types of insulation, vehicle brake linings, gaskets and acoustical plaster. Asbestos was officially banned in 1999. However, it is still present today in many products.

TYPES OF ASBESTOS-

There are 2 types of asbestos – Serpentine and Amphibole:

- **Serpentine-** A sheet or layer in structure – Easy to Wet
 - **Chrysotile** – Is the most common type – accounts for 95% of use in the USA.
 - Known as “white,” because of its natural color.
 - Uses – spray-on fire proofing and insulation, vinyl floor tile, ceiling panels, mastics (adhesives), gaskets.
- **Amphibole-** Chain-like crystal structure – difficult to wet – has 5 types:
 - ✓ **Amosite-** 2nd most common type found in buildings.
 - Aka “brown” due to its natural color.
 - Uses – Hi-temp. applications (boiler & pipe insulation)
 - ✓ **Crocidolite** – has the thinnest and finest fibers of all asbestos.
 - “Blue” in color.
 - Uses – Hi-temp applications and electrical products.
 - ✓ **Anphophyllite**
 - ✓ **Tremolite** Extremely rare – has very little commercial value
 - ✓ **Actionlike**

Asbestos only becomes a hazard when it is disturbed.

ROUTES OF ENTRY INTO THE BODY-

Absorption – through the skin

Ingestion – by mouth or other body canals

Inhalation – breathing (the most common and primary source)

Injection – piercing on the body parts

RISKS INVOLVING ASBESTOS-

Inhaling the loose fibers is known to cause several serious and even fatal lung diseases, which are discussed below:

- ✓ **Mesothelioma-**
 - ~A type of cancer that affects the “mesothelium.” A thin lining in the chest and abdomen.
 - ~Always fatal- no cure and difficult to diagnose.
 - ~Not dose responsive (no cure) - 30 years to develop-uncommon.

Asbestosis-

- Not cancer- “lung scarring” - reduces lung capacity.
- Causes – Hi-levels of asbestos - can be arrested, but not cured.
- Ultimate death occurs usually from heart failure - 20 years to develop.
- Abatement workers (removal) not a threat-custodial can be (depending upon amount and time of exposure).

Lung Cancer-

- Caused by other things besides asbestos – like smoking.
- Smoking & asbestos greatly enhances the chances of developing cancer.
- Asbestos exposure – creates 5 times a more likely possibility to contract lung cancer.
- Smoking & asbestos exposure – makes you 10 times more vulnerable.
- Smoking & asbestos combination – makes you 50 times more vulnerable.
- 2- to 30 years to develop.

Pleural Thickening-

- This problem is linked to heavy asbestos exposure.
- Scarring of the lung lining (pleural)
- Causes the lung lining to thicken and swell.
- The lung is squeezed, causing breathlessness and discomfort.

Pleural Plaques-

- Areas of scar tissue on the lung lining.
- Usually no symptoms – they do not cause long-term health problems.

OCCUPATIONAL SAFETY TIPS-

- **Wear a Mask** – Employees working in asbestos exposed areas that are a constant threat must wear respiratory protection- a mask that has a self-contained breathing apparatus that protects against gases, dust and toxic substances- example is one with a HEPA filter.
- **Wash Clothes** – Working with asbestos, the clothing can become contaminated. Do not wear the clothing home but have a change. Wash the contaminate clothing in plain water to remove as much fiber as possible, and then wash them with detergent. When you change (if you aren’t at home) put the contaminated clothes in a bag to avoid any cross-contamination. Washing clothes with asbestos can be a major source of secondary exposure that can lead to a disease development.
- **Shower** – Asbestos can stick to your skin, like clothing. It is very important to shower after you finish with asbestos for the day. Many entities have installed showers for their asbestos related employees to have to offset the chance of contracting asbestos.
- **Proper Abatement** – Don’t take shortcuts! Follow all procedures regarding safety with asbestos.

WHEN IN DOUBT-SAFETY WINS OUT



K.I.S.S. > KEEP IT SAFE & SOUND

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Excerpts: www.nmshealth.com/blog/5-occupational-safety
www.take5and-stay-alive.com/asbestos

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