

## Toolbox Talk: Asbestos Awareness

**Description:** Asbestos is a naturally occurring mineral fiber. The name asbestos comes from the Greek word for “inextinguishable”. The ancient Greeks found that asbestos fibers were perfect for weaving into cloth much like cotton and for use as wicks for their sacred lamps.



Asbestos is unique in that its crystals form long, thin fibers. These fibers can be woven into cloth or mixed with other materials used in building products to add strength along with heat and chemical resistance. It has good insulating properties and was commonly added to products used for acoustical or thermal insulation.

Asbestos was predominantly added to products made between the 1950's and late 1970's. Asbestos may still be found in products made today including adhesives, caulking, floor tiles, roofing products and specialty

products such as gaskets and brake parts.

### Asbestos Facts:

- Under normal conditions the materials do not pose a health threat.
- If the material is cracked, drilled, sanded, or otherwise disturbed, it could result in their lease of asbestos fibers into the air that could present a health risk.
- If the outer canvas cover or metal sheathing on the pipes is intact, the insulation does not present a health problem.

### Asbestos Bans:

1973 – Spray-applied surfacing material such as fire proofing. (Environmental Protection Agency -EPA)

1975 – Thermal system insulation such as pipe insulation and block boiler insulation. (EPA)

1977 – Artificial fireplace embers and wall patching materials. (Consumer Product Safety Commission-CPSC)

1978 – Spray-applied surfacing materials not included in the 1973 ban such as decorative acoustical plaster. (EPA)

### Hazards

The properties that make asbestos such an attractive material to add to building products make it a health hazard when it is inhaled or ingested. The body has difficulty dealing with internal asbestos fibers. Adverse health effects can occur many years after exposure. Asbestos fibers are released into the air during activities that disturb asbestos-containing materials. The asbestos fibers can then be inhaled and trapped in the lungs. Asbestos does not have an odor or other mechanism to alert of an exposure. Asbestos-containing materials only present a hazard once they deteriorate or are disturbed.

## Which Materials May Contain Asbestos?

Some University buildings contain intact asbestos materials in public access areas. These materials may include:

- Vinyl asbestos floor tiles or linoleum sheet flooring
- Mastic used to attach flooring, ceiling tiles, carpet, cove base or cork board
- Pipe insulation
- Fireproofing
- Joint compounds used in sheetrock walls
- Acoustical/decorative plaster
- Fire doors
- Acoustic ceiling tiles
- Baseboards
- Concrete pipes and siding
- Exterior siding
- Window putty

## Asbestos-Related Diseases

The primary adverse health effects related to asbestos exposure come through inhalation of the fibers. The aerodynamic properties of the fibers enable them to remain airborne for long periods of time and make them easily inhaled deep into the lungs. Asbestos-related diseases normally take anywhere from 20 to 40 years to develop.

Following are the primary asbestos related diseases:

- Asbestosis – Scarring of the lung tissue that reduces the ability of the lungs to function properly. Associated with repetitive exposures over the course of many years.
- Lung Cancer – Typically associated with repetitive exposures over the course of many years. Smoking greatly increases the risk.
- Mesothelioma – Rare cancer of the lining of the lungs or abdominal cavity. It is unique in that it does not appear to require significant exposure in order to develop the disease.

## Asbestos Management

University facilities departments are responsible for properly managing asbestos in buildings and related spaces according to the universities Asbestos Management Program. This program outlines functions the department and/or contractor will perform with regards to notification, monitoring, jobsite controls, safe work practices, recordkeeping, and other requirements for maintaining asbestos in-place and for instances when asbestos may be disturbed.

Any work involving asbestos containing materials must be performed only by personnel who have received Asbestos Awareness Training or are certified asbestos workers using proper work practices, containment equipment and Personal Protective Equipment (PPE).

**For questions about asbestos, training, and other building regulated materials, contact EHS at 610-436-3333**