

## Asbestos Exposure – Health Hazards

Asbestos may be a component of a number of materials including flooring, roofing, shingles, insulation, old duct tape, and other building materials. When these materials are disturbed, microscopic asbestos fibers are introduced into the air.

When asbestos fibers are breathed into the lungs, they embed in the lung tissue and cannot be eliminated or removed. Once there they cause scar tissue to develop which results in diminished lung capacity and function leading to asbestosis.

Lung cancer, gastro-intestinal cancer, and mesothelioma can also be caused by inhaled asbestos fibers.



## Identifying Asbestos Exposure

When there is reason to believe that workers may be exposed to asbestos, the presence, location, and quantity of asbestos-containing materials (ACM) must be determined.

- There is no 'safe' level of asbestos exposure.
- Employees that can be expected to work in or adjacent to those areas must be notified of the presence of the ACM.
- Signs must be posted warning of the hazard.
- The permissible exposure limit (PEL) of asbestos is no more than 0.1 fiber per cubic centimeter of air (0.1 f/cc) over an 8-hour period.
- Testing, including personal air monitoring, must be done to accurately identify the level of exposure.



0.1 f/cc

## Safe Work Requirements

Workers must be protected against exposure above the PEL.

- Asbestos work done within regulated areas must be supervised by an Asbestos Competent Person.
- Regulated areas must be established to confine asbestos fibers, reduce airborne levels of exposure, confine asbestos fibers, and remove them safely without spreading them to other areas.
- High-efficiency particulate air (HEPA) filters must be used to prevent contaminated air from leaving the regulated area.
- Workers not directly involved in asbestos-related work must avoid the area. Regulated areas can reduce the spread of the fibers but cannot eliminate the risk of exposure.
- Personal protective equipment such as protective clothing and respirators may be required.
- Medical surveillance is required for workers exposed to asbestos above the PEL.

