# Asbestos

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FAQ Frequently Asked Questions

## What is Asbestos?

Asbestos is a naturally occurring fibrous mineral with documented uses dating back over 4000 years. Chrysotile is the most commonly encountered type of asbestos, accounting for up to 90% of asbestos products. Other forms of asbestos include amosite, crocidolite, tremolite, actinolite and anthophyllite.

The physical properties of asbestos, namely its incombustibility, high tensile strength, flexibility, insulating ability, resistance to chemicals and bacteria and its ability to control condensation, have resulted in asbestos being used in over 3000 different products.

Asbestos products generally fall into one of two forms, friable and nonfriable. Friable asbestos refers to a material that can be reduced to a powder by hand pressure. Nonfriable asbestos cannot be reduced to a powder by hand pressure. Friable forms of asbestos represent a greater hazard potential than nonfriable forms.

Friable asbestos products have, for the most part, been banned but some nonfriable products are still produced and are available in the United States.

In most instances, microscopic analysis is the only definitive method for determining whether or not a product contains asbestos.

## When does asbestos become potentially hazardous?

Asbestos containing materials that are undisturbed and in good condition are considered non-hazardous. Once asbestos is disturbed by either manual methods or through the process of physical deterioration, the risk of asbestos exposure increases. Dust containing micro-scopic asbestos fibers can become airborne which increases the chance that these fibers can be inhaled or ingested.

It is important to remember that asbestos can only be removed or modified under controlled conditions and by a licensed asbestos abatement contractor or by specially trained University workers.

Never cut, drill, hammer, saw, scrape, break or move any asbestos containing material.

## What are the potential health effects of asbestos exposure?

Asbestos has the potential to cause several different respiratory diseases and cancers. One unique aspect of asbestos related diseases is that the symptoms will not appear for 15 to 30 years following asbestos exposure.

Diseases typically associated with asbestos exposure include:

#### Asbestosis

 Involves scarring of the lungs and the gradual decrease in the ability to breathe and for the body to take in enough oxygen to sustain normal functions

#### Lung Cancer

- Involves the development of a malignant tumor of the bronchi covering within the lungs
- Smokers who are also exposed to asbestos are at 80 to 90 times greater risk of developing lung cancer than individuals who work with asbestos but don't smoke

#### Mesothelioma

- Refers to a cancer of the lining of the chest cavity or abdominal wall
- This type of cancer has a very poor survival rate
- Asbestos exposure is believed to be the only cause of mesothelioma
- Asbestos exposure has also been implicated as a risk factor for the development of cancers of the larynx, esophagus and gastro-intestinal tract.

Factors that determine an individual's chance of developing an asbestos related disease include:

- The amount and duration of asbestos exposure
- Whether or not an individual smokes
- The individuals age when the asbestos exposure occurred

# Where is asbestos found at the University of California, Riverside?

Asbestos can be found in numerous building related materials at the University. The most commonly encountered asbestos containing materials include

- Floor tile (most 9 inch, some 12 inch and older linoleum)
- Sheet flooring
- Floor tile adhesive (usually black in color)
- Sprayed on acoustical ceilings
- Gypsum (drywall) board and joint compounds
- Sprayed on fireproofing (typically above ceilings except in limited access maintenance areas)
- Pipe insulation (including hard mastic coatings)
- Roofing materials
- Laboratory fume hoods and laboratory table and counter tops
- Cementitious asbestos panels in windows, doors and as fire stops

Environmental Health and Safety should be contacted whenever there is a question concerning whether or not some material contains asbestos. \**The noted items represent only a partial list of some of the asbestos products that may be encountered at UCR, generally in the older campus buildings*.

# How is Asbestos Managed at the University of California, Riverside?

The Environmental Health and Safety office has the primary authority for asbestos-containing materials at all UCR facilities and oversees the UCR Asbestos Management Plan, which can be found on the EH&S safety webpage (<u>https://ehs.ucr.edu/safety#asbestos</u>). The UCR Asbestos Management Plan is designed to minimize the possibility of accidental disturbance of asbestos-containing materials and to protect UCR workers and building occupants who must work around these materials.

The UCR Asbestos Management Plan includes the following items:

- A written plan
- Outline of roles and responsibilities for various UCR departments
- An asbestos survey request system
- An abatement notification system to control activities that might disturb ACM
- A periodic, routine in-house monitoring or inspection system
- Asbestos management procedures and work practices
- Regulatory information and requirements
- A provision for training campus employees who will come in contact with the materials and, if necessary
- A medical screening program for campus custodial and maintenance employees who work around the materials
- A thorough documentation and recordkeeping system

The UCR Asbestos Management Plan follows a systematic approach to document UCR's intentions and to provide an inter-disciplinary approach to the protection of building occupants and employees. Therefore, technical assistance and recommendations are obtained from relevant parties including Environmental Health & Safety (EH&S), legal counsel, the building staff, Facilities Services (including maintenance and custodial personnel), The Planning, Design & Construction department, an architectural/engineering or consulting firm, medical advisor, and possibly contractors and other periodically employed journeymen who may work in the campus facilities.

# What regulatory standards apply to asbestos at the University of California?

The following asbestos related regulations apply to asbestos activities at UCR:

- Cal/OSHA (<u>8 CCR section 1529</u>)
- Cal/OSHA (<u>8 CCR section 8358</u>)
- Cal/OSHA (<u>8 CCR section 5208</u>)
- OSHA Asbestos Construction Standard (29 CFR 1926.1101)
- OSHA Asbestos General Industry Standard (29 CFR 1910.1001)
- EPA 40 CFR Part 61, Subpart M (NESHAP Asbestos Standard)
- EPA 40 CFR 763, Subpart E
- Asbestos Hazard Emergency Response Act (AHERA)
- South Coast Air Quality Management (SCAQMD) Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities)

## Who do I contact if I have an asbestos related question or concern?

Environmental Health and Safety https://ehs.ucr.edu/ ehs@ucr.edu (951) 827-5528

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