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 microscopic 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 gastrointestinal 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)
- Floor tile adhesive (usually black in color)
- Sprayed on acoustical ceilings
- Gypsum 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.*

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

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

- Cal/OSHA (8 CCR section 1529)
- Cal/OSHA (8 CCR section 8358)
- Cal/OSHA (8 CCR section 5208)
- OSHA Asbestos Construction Standard (29 CFR 1926.1101)
- EPA NESHAP Asbestos Standard

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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