

ASBESTOS AWARENESS TRAINING

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REGULATIONS

Southcoast Air Quality Management District - Rule 1403 -

requires asbestos testing for all structures prior to renovation or demolition, regardless of the building's age

Cal/OSHA - 8 CCR 1529 Asbestos Abatement and Removal -

Worker safety rules and protection during renovation or demolition.

Los Angeles County Asbestos Abatement and Removal Specifications - A 36 page document describing specific procedures required in LA County.



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REQUIRED TRAINING

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Training for facilities workers that may come into contact with asbestos during their work must include the following :

- How is asbestos used?
- What forms does asbestos come in?
- Where are asbestos containing materials on campus?
- How do I recognize damage to asbestos?
- What do I do if I suspect asbestos?



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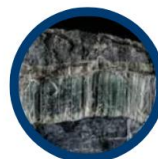
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WHAT IS ASBESTOS?

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Watch the following video for more information:

https://www.youtube.com/watch?v=w-NbTATy_o0



Chrysotile



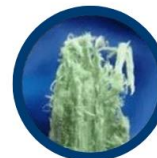
Amosite



Anthophyllite



Crocidolite



Actinolite



Tremolite

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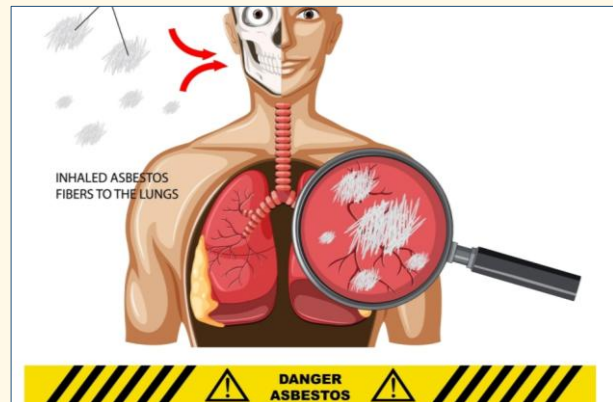
HEALTH EFFECTS

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In order for asbestos to be a health hazard, it must be **disturbed** and **airborne**, The latency period is between 15 and 40 years. The risk is calculated by the level and duration of the exposure.

Potential diseases:

- Lung Cancer
- Asbestosis
- Mesothelioma



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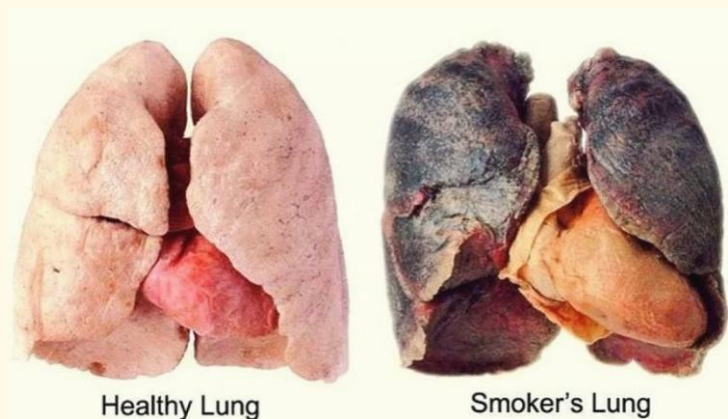
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SMOKING

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Smoking greatly increases the chance of developing disease.

- Impairs the body's defense mechanisms
- Increases risk of lung cancer



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ASBESTOS CONTAINING MATERIALS

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Asbestos Containing Building Materials

RACM vs. PACM - *Regulated vs. Presumed* Asbestos Containing Material (buildings constructed before 1980)

Some materials are a done deal. We know they contain asbestos. Others, we have to protect workers by assuming they contain asbestos until proven otherwise.

- Thermal system insulation - ceiling tiles and popcorn, pipes & boilers, attic & wall insulation
- Vinyl floor tiles
- Mastic used on baseboards, carpet, and other flooring
- Vapor barriers
- Shingles

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RECOGNITION OF DAMAGE

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Asbestos containing materials are suspected to be hazardous when:

- Friable
- Water Damage
- Delamination
- Deterioration
- Physical Damage



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RECOGNITION OF DAMAGE

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How to Identify Friable Asbestos



FRIABLE ASBESTOS

- Crumbles, frays, or breaks with little effort.
- Easy to damage.
- Dangerous to handle.
- Included in insulation, pipe lagging, spray-on paints, and surface coatings.



NON-FRIABLE ASBESTOS

- Can't be damaged by human hand.
- Resistance to damage.
- Less likely to release asbestos.
- Included in bitumen products, cement sheets, gaskets, and floor tiles.

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RECOGNITION OF DAMAGE

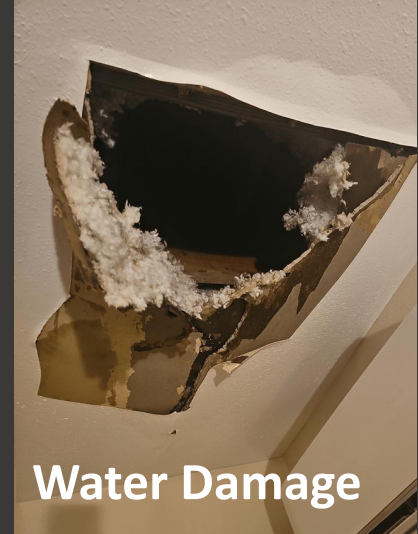
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RECOGNITION OF DAMAGE

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Water Damage

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RECOGNITION OF DAMAGE

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Deterioration

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Physical Damage

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RECOGNITION OF DAMAGE

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Although vinyl floor tile does contain asbestos, it is not harmful unless airborne.

That means that it has to be significantly deteriorated to be considered a threat.



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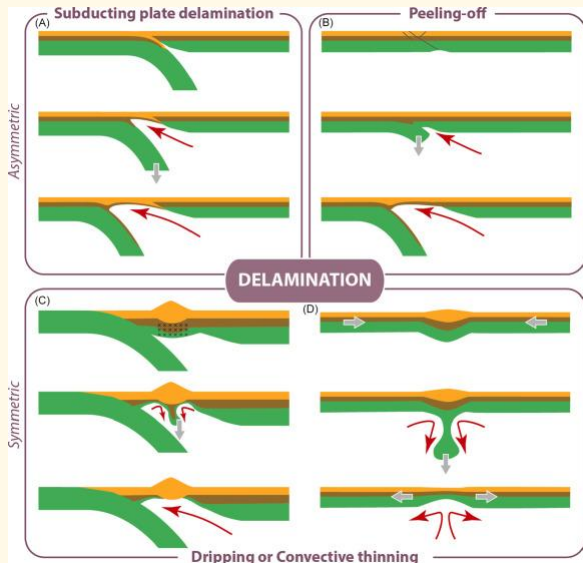
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RECOGNITION OF DAMAGE

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Delamination



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VERIFICATION OF ASBESTOS

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CSUDH has sampled buildings and materials for asbestos since the 1980s. If asbestos is suspected, the first step is to determine whether we have documentation from previous tests.

If no tests were performed, the following steps are taken:

1. Contact EHS to take samples.
2. EHS will take the sample to the lab for verification.



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ABATEMENT

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The contractor performing the abatement will:

- Demarcate the hazardous area
- Seal off air ducts and ensure that the HVAC system is disabled
- Use hand tools and the wet method & HEPA vacuuming to remove the asbestos
- Place asbestos waste in disposal bags, sealed, and removed
- Perform a final cleaning of all work surfaces using the same method
- Provide EHS with abatement records

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EMERGENCY PROCEDURES

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An emergency is a major fiber release greater than 3 square feet.

What to do:

- Stop work immediately
- Do not attempt clean-up
- Secure the area
- Notify your manager
- The manager will contact EHS
- Do not re-enter the area until instructed to do so



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TEST!

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Which one of these illnesses is caused by asbestos fibers?

- A. Blood Cancer
- B. Mesothelioma
- C. Dermatitis
- D. Asthma

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TEST!

CSUDH

Which one of these illnesses is caused by asbestos fibers?

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- B. Mesothelioma
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Who is required to take basic asbestos awareness training?

- A. Anyone who may disturb asbestos in their work
- B. Asbestos removal workers
- C. People working directly with asbestos
- D. Asbestos manufacturers

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The other three groups require advanced training.

Who is responsible for taking asbestos samples?

- A. Environmental Health and Safety
- B. An asbestos abatement company
- C. The employee who suspects asbestos is present
- D. The manufacturer of the suspected product

Who is responsible for taking asbestos samples?

- A. Environmental Health and Safety
- B. An asbestos abatement company employee
- C. The employee who suspects asbestos is present
- D. An outside contractor performing work on site

Trick question! It could be all of them or none of them. Where you work isn't the deciding factor. Anyone taking samples must have gone through coursework and the state certification process.

What color will help you identify the presence of asbestos?

- A. White
- B. Grey
- C. Brown
- D. You can't identify asbestos by color.

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What should you do if you suspect the presence of asbestos during your work?

- A. Finish the job as quickly as possible
- B. Stop all work immediately and report it to your supervisor
- C. Poke it with a stick
- D. Put on gloves and a respirator and continue working

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Taking a photo would also be a good idea.

QUESTIONS?



Environmental Health and Safety manages the
Stormwater Program and all Environmental Compliance.
Check out our webpage at <https://www.csudh.edu/ehs/>

If you have any questions, contact us any time at ehs@csudh.edu