**Objective:** To provide an overview of the hazards of asbestos and the precautions to protect employees from excessive exposures

Asbestos is a naturally occurring mineral fiber. Decades ago, it was used in numerous building materials and vehicle products. Today is it used far less. The most significant hazard relates to the demolition and deterioration of materials containing asbestos, which could lead to inhalation and potential serious health hazards.

**Sources of Asbestos**

The following materials are presumed to contain asbestos if they were installed before 1981:

* Thermal system insulation
* Roofing and siding shingles
* Vinyl floor tiles
* Plaster, cement, putties, and caulk
* Ceiling tiles and spray-on coatings
* Industrial pipe wrapping
* Heat-resistant textiles
* Automobile brake linings and clutch pads

**Health Effects**

* Short-term health effects include eye, skin, and respiratory irritation.
* Long-term health effects are a much greater concern. They can take as long as 30 years to manifest and may include the following:
* Lung cancer
* Mesothelioma (a rare cancer, specific to asbestos)
* Asbestosis (asbestos deposits in the lungs)
* Breathing difficulties
* Interstitial fibrosis (scarring of the lungs)

**Safe Work Practices**

**Access to areas containing intact asbestos:**

Do not work around asbestos-containing materials (ACM) unless the following conditions are met:

* TheACM is **intact, enclosed, or encapsulated** with no likely exposure to asbestos.
* Your work in the area is essential (such as housekeeping or HVAC work in boiler rooms).
* You have completed asbestos awareness training.
* You are able to avoid damaging any ACM.
* Your work is restricted in these areas to the greatest extent possible.

**Access to areas containing damaged asbestos:**

Do not work with or around damaged or deteriorated ACM **unless you are certified** to do so.

The work of remodeling, repairing, or demolishing asbestos-containing areas is restricted to contractors certified in asbestos abatement.

**Hygiene practices:**

* Use proper HEPA-filtered vacuum systems to clean up any dust which may contain asbestos in asbestos-regulated areas; avoid all dry sweeping and the use of compressed air.
* Use good personal hygiene, including good hand washing practices after working in an asbestos-restricted area prior to eating, drinking, smoking, chewing tobacco or gum, or applying cosmetics. Also, never do these activities while in an asbestos-restricted area.

**Exposure Response**

If you experience any health-related signs or symptoms or significant exposures to asbestos are suspected, contact your employer immediately and seek proper medical assistance.

**Employer Responsibilities**

**Assessment and program:**

* Identify all ACM by assessing all areas where asbestos may be present.
* Establish an Operations and Maintenance (O&M) program for asbestos and assure that it is followed.
* Monitor the condition of ACM through periodic visual inspections of areas with asbestos to assure that ACM remains intact.
* Assure that **all** assessments are only conducted by EPA-trained and certified individuals.
* Assure that **all** employees who have to work in ACM-containing areas are given asbestos awareness training.

**Warning signs and controlled access:**

* Regulate asbestos-containing areas with signs containing OSHA-specified language.
* Properly label any asbestos-containing pipes to indicate the presence of asbestos.
* Restrict all nonessential employees from accessing areas where ACM is present.
* Restrict all employees from accessing areas of damaged or deteriorated ACM. These areas should be accessed only by asbestos-certified contractors.

**Contractor safety:**

* Utilize outside contractors who are certified in asbestos to conduct all work which may involve asbestos exposures.
* Assure that proper control methods are in use, including sealed containment areas with negative pressure HEPA vacuum machines or glove bagging of piping if the asbestos is contained in a small area.
* Assure that contractors conduct proper air monitoring to assure that there is no contamination outside the work zone during the project.
* Assure that clearance sampling occurs after the project is completed. The results must be non-detectable prior to opening up the area to general employees or the public.
* Assure that contractors use good personal hygiene practices.

**Contractor safety (continued):**

* Assure that contractors have an established work plan with properly defined decontamination areas, change rooms, and shower facilities that keep contaminated clothing separate from clean clothing and otherwise prevent contamination outside the asbestos abatement work area.
* Assure that lunch room facilities remain uncontaminated.
* Assure that local exhaust ventilation with HEPA filtration and wet methods are utilized to suppress dust formation.
* Assure that contactors do not dry sweep or use compressed air where asbestos may be present.
* Assure that contactors do not sand floor tile that potentially contains asbestos.
* Assure that contractors use proper respiratory protection and full body personal protective equipment (PPE), without any skin exposure or openings where asbestos may penetrate and directly contact skin.
* Assure that contractors abide by the medical surveillance and all other OSHA requirements.
* Assure that contractors HAVE documentation of asbestos training and certification records for each asbestos contractor employee who will be working on the site.
* Assure that contractors comply with **all other aspects of the OSHA standard** and follow all applicable **EPA regulations**.

**Resources**

* For further information regarding the health effects of asbestos, please consult OSHA’s Asbestos Standard:
* 29 CFR 1910.1001 for general industry
* 1915.1001 for the shipyard industry
* 1926.1101 for construction
* For further information about asbestos requirements that pertain to schools (AHERA) and contractor certification requirements, please refer to the EPA Asbestos regulations (40 CFR Part 763, Subpart E) and associated state regulations.

This form documents that the training specified above was presented to the listed participants. By signing below, each participant acknowledges receiving this training.

Organization: Date:

Trainer: Trainer’s Signature:

**Class Participants:**

Name: Signature:

Name: Signature:

Name: Signature:

Name: Signature:

Name: Signature:

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