

## ASBESTOS MANAGEMENT PROGRAM

Yale Environmental Health and Safety coordinates the University's Asbestos Operations and Maintenance Program. This program is designed to ensure that ACM is appropriately managed on-campus to meet federal and state regulatory requirements as well as to minimize potential health risks to the University community. The overall program is comprehensive in nature and managed by certified safety and health professionals. Key program elements include:

- General information about asbestos properties, hazards, classes, and regulations;
- Procedures for building surveys, inspections, and hazard assessments;
- Safe work practices and procedures for maintenance and custodial activities during which workers may contact ACM;
- Information regarding ACM-related training;
- A pre-work review process to ensure that employees are knowledgeable about the presence of ACM during service, maintenance, and custodial work;
- Procedures for communicating ACM-related information to contractors and other outside service providers;
- ACM disposal procedures; and
- Response procedures for ACM-related emergencies.

### Asbestos

Asbestos is the generic name for a group of naturally occurring mineral fibers that combine the unique qualities of strength, durability, and insulating abilities. Due to these qualities, asbestos has been incorporated into a wide variety of construction products during the past century. Although most of these materials were banned by the USEPA in the mid 1970s, asbestos can still be found in a small proportion of products that contain certain binding agents, e.g., some vinyl floor tile, roofing material, and cement pipe.

Although asbestos is well recognized for its potential health effects, this potential hazard can only be presented when small particles become airborne, inhaled, and then deposited within the lungs. Epidemiological studies have shown an increased incidence of several illnesses among industrial asbestos workers, including asbestosis (a debilitating lung disease), lung cancer and mesothelioma (a cancer of the lung cavity lining). In these studies, asbestos industry workers who were generally exposed to high very levels of airborne asbestos over extended periods of time, primarily in the shipbuilding, insulation manufacturing, and heavy construction trades. Intact, sealed, or otherwise undisturbed asbestos material in buildings has not been identified as a health hazard to building occupants of others work around the area.

### Asbestos Surveys/Sampling

Like any other facility with buildings constructed prior to the 1980s, many of the approximately 400 buildings located on the Yale campus have asbestos-containing materials and components. In some areas, asbestos has been identified in: fireproofing (spray-applied to structural steel or concrete); pipe, boiler, tank and air duct thermal insulation; roofing felt and mastic; cement-type flue; conduit, pipe, and siding; wall and ceiling textured or acoustical surfacing plaster; vinyl floor tile and linoleum; flooring, wall basecove and ceiling tile adhesive; caulking and window glazing compound; acoustic ceiling and wall tile; fume hoods, exhaust ducts, and laboratory counter tops; and fire-rated doors. EHS has performed or coordinated hundreds of asbestos surveys and audits to detect the presence of this material in University buildings. This data has been compiled into a database for

EHS and facilities staff use to identify and properly manage asbestos-containing building components.

EHS requires air monitoring as part of any planned asbestos abatement work to ensure that fiber levels are within permissible exposure limits for the abatement workers as well as nearby building occupants.

### **Safe Handling of Asbestos-Containing Material**

Since the health and hazard of asbestos is a function of its potential to become airborne, safe work practices are designed to prevent disturbance and release of ACM. Barriers to release include insulation wrapping or jacketing, encapsulation with special paints or adhesives, or existing binders (i.e., as in floor tiles) that essentially eliminate the potential for undisturbed release. Secondary barriers may exist to further prevent asbestos fibers from reaching the workplace, including walls and ceilings that separate asbestos from public areas.

Renovation work of campus buildings is reviewed in advance by EHS to ensure that asbestos-containing materials are not disturbed or, if disturbed, that the proper safeguards are in place. Work which requires removal or repair of asbestos-containing material and/or the testing of suspect asbestos-containing material is restricted to trained and qualified persons only.

To protect yourself as well as those around you, immediately report any observed damage or deteriorated suspect asbestos containing materials to your supervisor, Facilities Superintendent or EHS. If your job duties require regular contact with building materials, including custodial activities of tiled flooring, you will receive additional training about asbestos and how you can further reduce any incidental exposures. In the meantime, do not remove, cut, drill, sand, grind or otherwise abrade any construction material which may contain asbestos.

### **Further Information**

EHS maintains a staff of certified licensed asbestos professionals, who conduct building material surveys, coordinate and supervise asbestos construction activities, perform air monitoring, and train employees. Should you have specific questions related to this information or would like a safety professional to review this information with you, please contact the Asbestos Program Coordinator at 203-737-4453.