

## **ASBESTOS AWARENESS**

### **WHAT IS ASBESTOS?**

Asbestos is a term used to describe about six naturally occurring fibrous minerals found in certain types of rock formations. Of those six, the minerals chrysotile, amosite and crocidolite have been most commonly used in building products. Asbestos has been used as a reinforcement fiber for about 3000 years. The health hazards of asbestos were recognized in the late 1970's. Most building materials produced after 1980 no longer contain asbestos fibers.

### **WHY IS ASBESTOS HAZARDOUS?**

Asbestos is a very small thin fiber. During production of building materials, asbestos fibers are mixed with binders to hold the fibers together. Asbestos fibers are so small that they are invisible to the naked eye. They are also very light and have the ability to remain suspended in the air for many hours. If these fibers are inhaled, over time they may cause illness and even death. OSHA estimates that smokers who are exposed to airborne asbestos have a 700% greater chance of contracting an asbestos related disease than non-smokers exposed to the same concentrations of airborne asbestos.

There is also a concern for the health and safety of workers involved in building maintenance work because of the possible periodic exposure to elevated levels of asbestos fibers while performing their jobs.

Whenever the discussion of the risk posed by airborne asbestos arises, we must keep in mind that asbestos fibers can be found nearly everywhere in our environment, although usually at very low levels. The OSHA permissible exposure limit for asbestos is 0.1 fiber per cubic centimeter of air as an 8 hour twa or an airborne excursion limit of 1.0 fibers per cubic centimeter of air as averaged over a sampling period of 30 minutes.

### **WHEN IS ASBESTOS A PROBLEM?**

The mere presence of asbestos in a building does not mean that the health of the building occupants is in danger. Intact and undisturbed asbestos material does NOT pose a health hazard. Material containing asbestos, when in good condition is unlikely to release asbestos fibers into the air. When asbestos containing materials are properly managed the release of asbestos fibers into the air is prevented or minimized, and the risk of asbestos-related illness is eliminated or reduced to near zero.

Asbestos containing materials can become hazardous when, because of damage, disturbance or deterioration, they release fibers into the air. Any asbestos containing material that has become “friable” is hazardous. Friable means the material is easily crushed, crumbled or reduced to powder by hand pressure.

### **ACM and PACM**

The terms “Asbestos containing material” (ACM) and “Presumed asbestos containing material” (PACM) are used to define materials. ACM is used when materials are known to contain more than 1% asbestos by weight. This is usually determined by sampling and analysis of the material. PACM is used to identify materials that are reasonably believed, or presumed to contain asbestos, but have not been tested.

Asbestos may be found in any number of building materials, but are typically found in three major type of building materials:

Applied surface materials – such as sprayed or trowled on surfacing on ceilings and walls (acoustical finishes, plasters, decorative finishes, drywall mud and joint compounds and fireproofing.

Thermal system insulation – found on pipes and pipe ducts insulation.

Miscellaneous materials – such as suspended ceiling panels, floor tiles and mastics, transite wallboard, vinyl flooring, and brake and clutch linings.

In our attempt to minimize employee exposure to asbestos, we have divided projects into three categories:

1. Projects/activities that are unlikely to involve any direct contact with ACM/PACM
2. Projects/activities that may cause accidental disturbance of ACM/PACM
3. Projects/activities that will involve relatively small disturbances of ACM/PACM

Number 1 could include routine cleaning of equipment or surfaces in a building. Generally, such activities would not be expected to disturb ACM/PACM.

Number 2 could include maintenance projects requiring access above a suspended ceiling, or around TSI.

Number 3 involves maintenance, repair, or installation projects involving minor disturbances of ACM/PACM. At this time, this level of maintenance work is contracted out.

WISHA regulations require a building owner to inform building occupants, outside contractors and others of the type, location and condition of all ACM/PACM in a building. Why? “Building occupants should be informed of any potential hazard in their vicinity, as “informed persons are less likely to unknowingly disturb the material and cause fibers to be released into the air”

What do you do if you think there is an asbestos hazard in your building? Report it right away! Secure the area if possible. Report any evidence of disturbance or damage of ACM/PACM to the Safety Coordinator.

Report any dust or debris that might come from ACM/PACM, any change in condition, or any improper actions of building personnel to the Safety Coordinator.

For information about asbestos in your building, contact Kathy Rogers at [rogerska@whitman.edu](mailto:rogerska@whitman.edu)