Asbestos occurs naturally on every continent in the world, and thanks to our ancient ancestors, can be found in a bevy of items. This month, Risk Management would like to shed some light on the hazards of asbestos, asbestos management, as well as, some common misconceptions.

**Demystifying Asbestos**

**The Origin of Asbestos**

Archeologists uncovered naturally occurring asbestos mineral fibers in debris dating back to the Stone Age, some 750,000 years ago. It is believed that as early as 4000 B.C., asbestos’ long hair-like fibers were used for wicks in lamps and candles. Asbestos use was rampant across the U.S. until the 1980s.

Why asbestos? Simple: It was cheap, durable, flexible and naturally acted as an insulating and fireproofing agent. The construction and manufacturing industries fell in love with its potential and used asbestos-containing products whenever possible.

During World War II, use of these products peaked, and the shipbuilding industry utilized the mineral extensively. From the early 1900s to the 1970s, asbestos was the ideal material to use.

**Asbestos in Products**

The use of asbestos-containing products stretched across a number of industries. Although most of the products could be categorized as either construction or automotive materials, some were general. Asbestos could be found in automotive parts (such as brake pads, clutches, hood liners, gaskets and valves), tiles (floor, ceiling and roofing varieties), cement, and textiles (such as blankets, firefighter suits and rope). Products today can be made with asbestos as long as it accounts for less than 1 percent of the product. Current products include brake pads, automobile clutches, roofiing materials, vinyl tile, cement piping, corrugated sheeting, home insulation and some potting soils. Some materials in schools that may contain asbestos include: ceiling tiles, vinyl flooring (including backing and glue), wallboard, duct work for heating and cooling systems, pipe wrap insulation, boiler insulation.

**Friable or Non-Friable, That is the Question**

For some, visions of a deep fat fryer and county fairs perhaps spring to mind when the word friable (fry-able) is uttered, but all jokes aside, there is an important distinction between friable and non-friable when it comes to determining one’s health exposure to asbestos. Generally speaking, asbestos containing material is in a friable state, if it is capable of being crumbled and reduced to powder, when dry, by the use of hand pressure. It is considered non-friable when it contains more than one percent asbestos, but cannot easily be crumbled or reduced to powder under hand pressure.

Non-friable Asbestos Containing Materials are generally not considered to be a health risk since the fibers are normally bound or contained in the building material itself.
Demystifying Asbestos (continued)

So There’s Asbestos In My Workplace, Should I Be Worried?
Source: www.epa.gov

Schools manage their Asbestos Containing Materials (ACM) according to the Asbestos Hazard Emergency Response Act (AHERA). Under AHERA, schools are required to inspect their schools for asbestos-containing building material, prepare management plans to take action to prevent or reduce asbestos hazards. These requirements are founded on the principal of “in place” management of asbestos containing material (ACM).

Removal of some ACMs is not necessary unless the material is severely damaged or will be disturbed by a building demolition or renovation project. A copy of the school’s asbestos management plan is available at each school site. LACOE’s own Facilities and Construction Division performs periodic surveillance of school locations to ensure proper management of suspected asbestos containing materials. Inspections such as these serve to provide prevention from an innocuous form of asbestos (non-friable) becoming a riskier form of asbestos (friable).

For those who may encounter asbestos in the workplace passively (i.e. —do not perform remediation, demolition, renovation, routine maintenance on working surfaces and structures) exposure is unlikely when working near or in areas with non-friable ACM.

For those that actively work with building materials (i.e. —grinding, abrading, cutting, etc.), which may require the handling of, or working near friable/non-friable ACM, a determination of the type and location of materials they plan on handling would need to be reviewed, the manner in which they will work with the material and the personal protective equipment (PPE) used would determine potential exposure.

LACOE’s Division of Facilities and Construction also provides annual training to staff who may be impacted by construction, demolition, or repair work. School administrators are invited to attend and confirm their understanding on risks and requirements to better manage staff’s questions onsite.

If There’s Asbestos in a Building Shouldn’t It Be Labeled?
Source: www.epa.gov

Technically, asbestos containing building materials should be labeled, but the question is where is signage necessary.

Regulations require that areas which are inspected for and discovered any asbestos-containing material with respect to a school building shall attach a warning label to any asbestos-containing material in routine maintenance areas (such as boiler rooms) of the school building. The key takeaway is that the signage is required in routine maintenance areas.

Why maintenance areas? Because it is in these areas that asbestos is more likely to be disturbed, and thus exposing asbestos.

Why are people so concerned about Asbestos?
Source: www.epa.gov

There are several health reasons to be concerned about asbestos.

Because asbestos is fibrous in nature and small enough to breathe in, it can impact the lungs and over time individuals exposed can develop mesothelioma, lung cancer and asbestosis.

Smoking doesn’t help. Asbestos exposure combined with smoking greatly increases the risk of developing lung cancer.

If you inhale both these substances you run a greater risk of disease that if you were exposed to either substance alone.