

Asbestos at the University at Albany Fact Sheet

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What is asbestos?

Asbestos is a naturally occurring mineral fiber. Indeed, it can be found in extremely low amounts in outside air. It has been used for hundreds of years in various applications, due to its strength and ability to resist heat and corrosion. The Romans and Greeks used asbestos as wicks in lamps, burial shrouds, and tablecloths. More recently, with the advent of the Industrial Revolution, asbestos was used for insulating high-temperature equipment, such as steam engines, steam pipes and turbines. The real commercial use of asbestos increased during the 1900's and peaked in the period from World War II into the early 1970's, when the health risks associated with asbestos could no longer be denied.

Asbestos was used in the manufacture of more than 3,000 products, including textiles, building materials and brake linings. Currently, only six categories of asbestos containing products have been banned by the federal government, and asbestos is still used in many building/construction materials. Many countries still mine asbestos, including Russia, China, and Brazil.

There are 3 main types of asbestos: chrysotile, amosite and crocidolite. Chrysotile or white asbestos is fibrous, serpentine in shape, curvy and flexible. It can be woven into cloth. It accounts for over 90% of the asbestos used in the United States. It is the most common type of asbestos found in some building materials used at the University at Albany. Chrysotile is thought to be less of a health hazard than the other two main types of asbestos due to its serpentine shape. Amosite or brown asbestos and crocidolite or blue asbestos are amphibole in shape, which means they are straight, stiff, needle-like fibers.

What are the health risks of asbestos?

The health hazards of asbestos were recorded as early as the Roman Empire. At the turn of the 20th century, researchers began to notice a large number of deaths and lung problems in asbestos mining towns and that asbestos workers were dying unnaturally young. The first diagnosis of asbestosis, fibrotic scarring of the lungs from exposure to asbestos, was made in 1924. In the 1930's, major medical journals began to publish articles that linked asbestos exposure to cancer.

In the 1970's, the Environmental Protection Agency (EPA) and the Occupational Health and Safety Administration (OSHA) began to regulate asbestos. Today, workers are protected from exposure to asbestos, as a result of strict regulations and enforcement. The University at Albany strictly adheres to these regulations. In New York State, asbestos abatement is regulated by the NYS Department of Labor, Code Rule 56, and the NYS Department of Environmental Conservation regulates asbestos disposal.

Asbestos can pose a health hazard when inhaled and/or ingested most likely over long periods of time. The most common route of exposure is through inhalation. Asbestos fiber bundles can split with small, fine fibers breaking away. It is these fine fibers that can lodge in the lungs and causes asbestos-related diseases, such as asbestosis, lung cancer and mesothelioma. The delay between exposure to asbestos and onset of disease is approximately 10-50 years and is referred to as the latency period. The more asbestos fibers that are inhaled, the greater the risk to one's health. The combination of asbestos exposure and smoking greatly increases the risk of developing lung cancer. A person who works with asbestos and also smokes, is likely to have a 90 times greater risk of contracting lung cancer.

Where can asbestos containing materials (ACM) be found at the University at Albany?

As the University at Albany's Uptown Campus was built between 1964 and 1971, asbestos can be found in some of its building materials. It can also be found in building materials on the University's other campuses. The asbestos containing materials at the University at Albany primarily include: original 9" x 9" beige floor tiles and mastic, selected thermal pipe and tank insulation, selected acoustical plaster in the residence halls, glue dabs, selected fire doors, fireproofing, certain high temp valves and valve packings, window glazing, plus others.

If asbestos containing materials are not disturbed, they are not a hazard. The potential for exposure occurs when these materials are disturbed. Asbestos can become an airborne hazard, especially if it is considered friable. A material is considered friable if it can be reduced to powder by hand pressure when dry. This term is important when looking at the health risks of asbestos. The more friable the material, the more likely it will become airborne.

Before any renovation project is started on campus, an asbestos survey is done to confirm where asbestos might be located. If asbestos is located, a professionally licensed abatement contractor is hired to perform an asbestos abatement according to NYS Code Rule 56. The abatement is completed before the renovation begins. The University has been abating asbestos for decades following NYS Code Rule 56, but asbestos remains in building materials and will likely remain until a building is completely gut renovated.

What about the ceilings in the residence halls?

Selected ceilings on the Uptown Quads (Dutch, Colonial, Indian, and State) were originally constructed with acoustical plaster that contains a low percentage of chrysotile asbestos. The University, by OSHA regulation, is required to notify occupants of the presence of these ACM ceiling materials and, out of an abundance of caution, places warning signs on the back of residence hall bedroom doors where the materials exist. Moreover, the residential license required for student room use shares this information as well. Undisturbed, there is no threat to health or safety by the presence of these ceilings.

Nonetheless, the ceilings, from original 1964-1971 construction, have become unattractive, and there continues to be concerns from parents and students regarding safety, as the messaging on ACM materials in ceilings can be alarming without proper context. Accordingly, the University will initiate a multi-year program to upgrade suite room and bedroom ceilings in quad buildings that haven't already been upgraded. The project will both remove the acoustical plaster and

refresh and brighten the rooms with new finishes. The work will be performed over the summer intersessions beginning summer 2018.

Where can I get information on asbestos at the University at Albany?

The Office of Environmental Health and Safety can answer questions concerning asbestos at the University at Albany. The Office's main line is 518-442-3495.

Questions about specific asbestos abatement projects that are underway should be directed to Customer Service at 518-442-3480.

ADDITIONAL RESOURCES

NIH – NATIONAL CANCER INSTITUTE – Asbestos Exposure and Cancer Risk

<https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/asbestos/asbestos-fact-sheet>

OSHA – Fact Sheet - Asbestos - <https://www.osha.gov/Publications/OSHA3507.pdf>

EPA – Learn About Asbestos - <https://www.epa.gov/asbestos/learn-about-asbestos>