

# Asbestos Basics

## What is Asbestos?

A fibrous naturally-occurring mineral with unique self-adherent, insulating and fire-resistant properties.

## Is there more than one type of Asbestos?

Yes, there are three types of diminishing rigidity (and therefore hazard): Crocidolite, Amosite and Chrysotile.

## What was asbestos used for?

Asbestos was used in many applications as reinforcement for a weaker substrate, as insulation and for sound-proofing and fire-proofing.

## What are the hazards associated with Asbestos?

The primary hazard associated with asbestos is lung damage due to the inhalation of fibres over a long period of time. Depending on the type of fibre, the length of exposure and the individual's other risk factors (smoking especially) exposure can cause respiratory difficulty, asbestosis, mesothelioma and on occasion other lung cancers. On rare occasions the ingestion of asbestos over the course of years has led to stomach cancer. The causal link of disease to asbestos exposure is very clear for individuals with very high exposures (200000 times greater than a building containing asbestos today) or very long significant exposures, but is less clear for long, low level exposures. The latency of disease associated with asbestos is 15 to 30 years.

## When does Asbestos Containing Material constitute a hazard?

Basically asbestos only constitutes a hazard at all when it is "friable". That is, when fibres have the potential to be released into the air. Fortunately, due to its self-adherent properties, this state is rarely created, and if it is can be easily controlled by adding moisture. In addition, only fibres of a certain size (large enough to settle in the lungs instead of being exhaled, and small enough to get past the body's primary protection of cilia and mucus) remain in the body once inhaled.

## Do we have Asbestos Containing Material at Brock?

Yes. Generally, it is all contained and can't become friable unless deliberately disturbed. Individuals whose work involves disturbing asbestos containing materials need to be properly trained on how to do it safely.

## What about falling insulation?

This is Brock's most common asbestos-related problem, which has become quite a nuisance in parts of MacKenzie-Chown. That insulation contains only 5-10% of the mildest threadlike form of asbestos, chrysotile, and really is unlikely to constitute a health hazard. Air testing in the building, even during clean ups, has never yielded fibre levels above the detection limit of the instrument, which is well below the regulatory limit for healthy and safe building occupancy.

Because it is a regulated substance, asbestos must still be treated with proper respect. *The following handling procedures must be followed:*

### Small Disturbance or Unexpected Release

If less than a handful of suspect Asbestos Containing Material (ACM) is loose or has fallen, call ext. 3508 for Custodial Services' trained staff to clean it up. If there is a delay in their response the material can be misted with water or covered with a damp paper towel until they arrive. They may use wet methods or a HEPA vacuum to clean it up.

### Significant Disturbance or Release

If greater than a handful of suspect ACM is loose or has fallen, Call ext. 3717 for Maintenance trained staff to assess whether more intensive clean-up and remediation is warranted. If so, the

most accessible debris will be cleaned by the Maintenance staff and an environmental contractor will be called in to do the rest. Isolation of the area may be required in extreme situations.

*If you have any questions about asbestos at Brock University, please email [oehs@brocku.ca](mailto:oehs@brocku.ca)*

[Click here for Asbestos Updates](#)