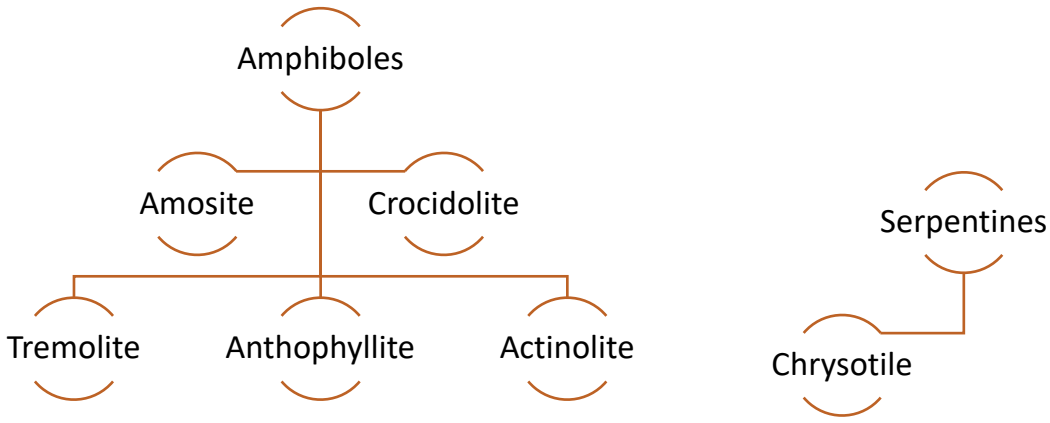
ASBESTOS FREQUENTLY ASKED QUESTIONS

1.0 WHAT IS ASBESTOS?

Asbestos is the common name given to a group of naturally occurring fibrous mineral silicates which come from certain rocks that have been subjected to a combination of temperature, pressure, and moisture conditions. Asbestos is produced in a commercially useful form by mining the ore and subjecting it to successive stages of crushing and aspiration. These fibrous minerals were used in a wide range of products in construction and industry, because of their unique properties which include chemical resistance, heat resistance and electrical insulation.

2.0 TYPES OF ASBESTOS

There are six minerals, falling under two groups which are classified based on the rock types that form the asbestos: serpentines and amphiboles.



The serpentine family includes only chrysotile or “white” asbestos which is the most common type.

The amphibole family includes amosite, crocidolite, actinolite, anthophyllite and tremolite. Of the amphiboles only the amosite and crocidolite have had any significant commercial use. Amosite (brown asbestos) has been used in thermal insulation and asbestos cement products where greater structural strength is required. Crocidolite (blue asbestos) is not as commonly used as chrysotile and amosite and has rarely been

encountered (found mainly as contaminants in other minerals). Tremolite, anthophyllite and actinolite are very rarely encountered and are found mainly as contaminants within other minerals.

3.0 FRIABLE VS NON-FRIABLE ASBESTOS

A friable material is a material that when dry can be crumbled, pulverized, or powdered by hand pressure. Due to their nature to easily release asbestos fibers, friable materials pose a greater risk of exposure. Examples of friable asbestos containing materials include sprayed fireproofing on structural steelwork or thermal insultation on pipes.

Non-friable materials are those that cannot readily be crumbled, pulverized, or powdered by hand pressure. These materials pose a lower risk of exposure than friable material. Most non-friable asbestos containing materials are rigid, but there are many pliable non-friable materials such as tars, caulking, putties, etc. It is important to recognize that non-friable materials can become friable, depending on the conditions or disturbances to which they are subjected. Examples of non-friable asbestos containing materials include vinyl floor tiles, acoustic ceiling tiles and asbestos cement products.

4.0 WHERE CAN I FIND ASBESTOS?

Asbestos has been widely used in the manufacture of building materials.

The use of friable asbestos containing materials in construction is banned in Canada today. However, due to the widespread use of friable asbestos containing materials in the past, these materials are still present in many buildings.

Of the non-friable materials, asbestos-containing drywall joint compound was banned in 1986 and all other non-friable asbestos containing materials ceased in the 1980's to 1990's due to lack of demand.

5.0 HEALTH RISKS ASSOCIATED WITH ASBESTOS

The mere presence of asbestos in a building does not constitute a hazard or unacceptable risk to health. Asbestos fibers are a concern when they become airborne because of disturbance or deterioration. Asbestos-containing materials that are in good condition, undisturbed and well managed will not release asbestos fibers into the air.

When airborne particles, such as asbestos, are inhaled, they must negotiate a number of natural defenses to reach the deepest parts of the lungs. There can be a long latency period between initial exposure, and the onset of disease. With asbestosis, except for the most severe exposures, the symptoms generally do not appear until at least 15-20 years after exposure had begun. Diagnosis of lung cancer and mesothelioma due to asbestos exposure are typically made a minimum of 20-40 years after exposure.

The *Ontario Royal Commission on Matters of Health and Safety Arising from the Use of Asbestos in Ontario* was established in 1981 and conducted several research studies looking at the risk to occupants from asbestos in buildings. The general conclusion of these research studies has been supported by independent

testing by independent researchers, the Ontario Ministry of Labour, and authorities in other jurisdictions. Air sampling showed that the airborne asbestos levels in buildings with friable asbestos products are no higher than outdoor levels unless the friable asbestos or asbestos debris is being disturbed at the time.

6.0 WHAT IS BROCK UNIVERSITY'S POLICY ON PROTECTING WORKERS AND STUDENTS?

Brock University is responsible to provide a safe and healthy environment free from avoidable or significant risks of serious injuries or illnesses associated with exposure to asbestos fibers. This responsibility is implemented through the Asbestos Management Program developed by the University.

The mere presence of asbestos in a building does not constitute a hazard or unacceptable risk to health. Asbestos fibers are a concern when they become airborne because of disturbance or deterioration. Asbestos-containing materials that are in good condition, undisturbed and well managed will not release asbestos fibers into the air. Brock University's Asbestos Management Plan establishes proper precautions, practices, and procedures to prevent the exposure of individuals to airborne asbestos fibers. The program meets the requirements defined under the *Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations (O. Reg. 278/05)*, under the Occupational Health and Safety Act of Ontario.

7.0 BUILDING SURVEYS AND INVENTORIES

The Hazardous Materials Inventory System (HMIS) is available to Brock University employees. Access to information is available through the HMIS website where it will take you to a secure login page. The inventory lists friable and non-friable asbestos-containing materials and identifies those materials that are confirmed or suspected to contain asbestos. Annual asbestos reassessment reports can also be accessible within HMIS.

8.0 WHO SHOULD YOU CONTACT WITH ANY CONCERNS?

If you have any questions or concerns regarding asbestos in your building, contact your supervisor or Health Safety and Wellness through the besafe@brocku.ca email or extension 7233.

9.0 ADDITIONAL INFORMATION

Health Canada

Ontario Regulation 278/05 – Asbestos on Construction Projects and in Buildings and Repair Operation

Asbestos Management Plan