

building knowledge

The Insight Scoop

Asbestos in the Home

SHOULD THE MERE PRESENCE OF ASBESTOS-CONTAINING MATERIALS (ACMS) IN A HOME, BE A CAUSE FOR ALARM?

In 1984, The Ontario Royal Commission on Asbestos stated: "While the health risk from asbestos in buildings may not be exactly zero, it is far below risks faced every day by Canadians in their ordinary lives." (Vol.2, p.585) and: "It is rarely necessary to take corrective action in buildings containing asbestos insulation in order to protect the general occupants of those buildings." (Vol.2, p.548)

In its January 29th, 1990 issue, Time Magazine questioned the justification of asbestos removal in homes in its article: An Overblown Asbestos Scare? where Charles Elkins, Director of the United States Environmental Protection Agency (EPA) is quoted as saying: "I would agree that in many cases removal is the wrong thing to do. It is a mistake for people to overreact."

WHAT IS ASBESTOS?

By definition, Asbestos is a natural mineral composed of microscopic fibers, which are extremely resistant to heat, abrasion, chemicals and electricity. These fibers can be separated and weaved into textiles, which will have these same properties.

Asbestos-containing materials (ACMs) appear in forms as diverse as brake linings, ironing board covers, and electric blankets, and include over three hundred products used in building construction.

In order to be a threat and pose health risks in the home, ACMs must not only be volatile and release fibers into the air, but must also be in a location where the fibers are allowed to enter living spaces.

ACMs exist in two states: 'friable' and 'non-friable'. Those ACMs that are liable to release fibers are said to be friable. This means that the material can be crushed; pulverized or powdered by hand pressure, or that is not sealed to prevent the release of fibers. It can also describe a material that is likely to crumble because of age, or accidentally damaged during cleaning or remodeling.

WHERE IS ASBESTOS FOUND?

Some examples of where friable asbestos materials can be found:

- 'Cottage cheese' acoustical coating for ceilings.
- Ceiling tiles.
- Some roofing and siding shingles.
- Some wallboard patching compounds.
- Houses built between 1930 and 1950 may have asbestos insulation.
- Vinyl-asbestos floor tiles and the backing on vinyl sheet flooring and adhesives.
- Heating ducts.
- Corrugated asbestos paper used to wrap heating and air-conditioning ducts (looks like gray paper).
- Linings of wooden fuse boxes.
- Sprayed decorative or fire-resistant coatings for ceilings, walls, or exposed steelworks.
- Textured paints.
- Block insulation on boilers.
- Preformed insulation for pipes.
- Door gaskets for wood and coal stoves, and for older gas or electric ovens and furnaces.
- Asbestos can also be present in some loose-fill vermiculite insulation.

ABOUT US

RMC INSIGHT has been delivering excellent value to our clients since 1995.

■ **Our home inspectors are known for their professionalism and honesty.**

■ **Our Inspectors perform a maximum of two inspections per day, ensuring quality time with every client.**

■ **If you have any additional concerns after your inspection, you can call us for a free telephone consultation.**

■ **We promise to help you "know your home".**

Asbestos in the Home (cont.)

Materials are said to be non-friable when it is not likely that they will release fibers into the air unless they are cut, broken, sawed, or sanded.

Non-friable ACMs include:

- Cement sewer pipes.
- Roofing tiles and shingles.
- Roofing tar and felts.
- Vinyl or asphalt flooring.
- Asbestos backed linoleum.
- Insulation on electrical wires that were installed with porcelain knob and tube.
- Fire-protection panels under furnaces, or next to stoves or heat stoves.

WHEN SHOULD YOU BE CONCERNED WITH CLEANING, REMOVAL AND/OR DISPOSAL OF ASBESTOS IN THE HOME?

According to Health Canada and the B.C. Ministry of Health, Asbestos poses no risk to your health as long as it is intact and not releasing fibers into the air. However, when asbestos starts fraying or crumbling, it forms a dust of microscopic fibres in the air that can adhere to moist lung tissues, causing diseases such as asbestosis (scarring of the lungs), lung cancer and mesothelioma (tumours in the lining of the body cavity).

When contemplating remodeling and/or renovations, homeowners should seek advice before removing or damaging materials thought to contain asbestos. Fibers may be released into the air if such products will be cut or damaged. This is important for budget purposes as disposal of asbestos related materials will add to the total cost of the renovation project.

CAUTION

If a house was built pre-1980, it probably contains some form of asbestos material;

sellers should refrain from answering 'NO' to questions relating to asbestos when completing the Property Condition Disclosure Statement. The correct answer should be "Don't Know".

HOW CAN AN ASBESTOS PROBLEM BE CLEANED UP?

Encapsulation: Encapsulants are used to prevent fiber release and hold asbestos containing material intact. There are several types of encapsulants on the market today including penetrating and bridging compounds. A penetrating encapsulant can be applied like paint. It seals the surface but does nothing to bind the asbestos containing material. Therefore, special care must be taken to add a thick layer of encapsulant, which will weaken that bond and cause the material to delaminate.

Enclosure: If the ACM is in an area where it will not be disturbed, the area can be sealed off from surrounding areas. An example of this is asbestos-insulated pipes in a crawl space, which can be sealed off from the main living spaces. The crawl space entrance should be labeled so that future owners will know to use caution when entering such an area.

Removal: This should be considered as a last resort (unless the ACM is significantly damaged) due to its high cost and should only be performed by a certified and insured asbestos professional. When a removal operation is in progress, the work space is isolated with plastic and put under negative pressure using negative air machines utilizing high efficiency particulate air (HEPA) filters. The ACM is removed after wetting with amended water. These steps prevent asbestos fibers from migrating out of the work area into other areas of the building. Small amounts of materials can

sometimes be removed by the glove bag method. After all of the material is repaired or removed a clearance air sample is taken by an independent third party to verify the success of the abatement.

CONCLUSIONS

If you suspect the presence of asbestos related materials in your home, we encourage you to contact an Environmental Consultant to determine the degree (if any) of contamination.

SOURCES

Facts on Asbestos and Asbestos in Buildings: Is immediate universal removal justified?
The Asbestos Institute
1130 Sherbrooke Street West, #410
Montreal, Quebec, H3A 2M8

From the Health files
Number 21a, September 1994
B.C. Ministry of Health and Ministry Responsible for Seniors.

Miscellaneous internet sites including but not limited to:
www.hcsc.gc.ca/english/iyh/products/insulation.html
www.epa.gov/asbestos/insulation.html

NOTICE TO THE READERS:

Although this information reflects housing experts' current knowledge, it is provided for general information purposes only. Any reliance or action taken based on the information; materials and techniques describe are strictly the responsibility of the user. Readers are advised to consult appropriate professional resources to determine what is safe and suitable in their particular case.

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