CANADA MORTGAGE AND HOUSING CORPORATION

The following fact sheet is part of the About Your House — General Series

Asbestos

What is asbestos?

Asbestos is a natural mineral with unusual qualities. It is strong enough to resist high temperatures, chemical attack and wear. A poor conductor, it insulates well against heat and electricity.

Asbestos crystals become long, flexible, silky fibres, so it can be made into a wide variety of forms. It can be spun into yarn, woven into cloth or braided into rope. Asbestos can also be added to materials as diverse as cotton and cement.

This combination of properties gives asbestos performance capabilities that are difficult to match.

What has asbestos been used for?

Asbestos has been used in hundreds of applications and products over the past 4,500 years. The ancient Greeks wove it into oil lamp wicks, funeral shrouds and ceremonial tablecloths. During the 1800s, it insulated the hot engines, boilers and piping that powered the Industrial Revolution.

For half a century, until the 1980s, asbestos was used in office buildings, public buildings and schools. It insulated hot water heating systems, and was put into walls and ceilings as insulation against fire and sound.

Asbestos has also been widely used in transportation and electrical appliances, frequently mixed with, and encased in, other materials.

Asbestos has also been found in many products around the house. It has been used in clapboard; shingles and felt for roofing; exterior siding; pipe and boiler covering; compounds and cement, such as caulk, putty, roof patching, furnace cement and driveway coating; wallboard; textured and latex paints; acoustical ceiling tiles and plaster; vinyl floor tiles; appliance wiring; hair dryers; irons and ironing board pads; flame-resistant aprons and electric blankets; and clay pottery. Loose-fill vermiculite insulation may contain traces of “amphibole” asbestos.How has the use of asbestos changed?

When it became evident that regular exposure to asbestos on the job involved health risks, the public became more concerned about exposure to asbestos in offices and schools, and, eventually, about all asbestos products.

This concern has led to a dramatic decline in asbestos use since the early 1980s. The use of asbestos insulation in buildings and heating systems has virtually disappeared. Residential use, for roofing, flooring and appliances, continues to decrease.

While alternative products are being developed to replace asbestos, products sold today containing asbestos are regulated under the Hazardous Products Act. Asbestos can be used safely, and public concern has led to improved product design and manufacture. Asbestos is now better encapsulated and sealed to reduce the escape of fibres.

Asbestos is valuable in many applications because it has been difficult to find comparable substitute materials. For example, it is still an important component of brake lining and clutch facings.

What health problems are associated with exposure to asbestos?

Health Canada states that the asbestos content of a product does not indicate its health risk.

Asbestos poses health risks only when fibres are in the air that people breathe. Asbestos fibres lodge in the lungs, causing scarring that can ultimately lead to severely impaired lung function (asbestosis) and cancers of the lungs or lung cavity.

Concern for the health of asbestos workers was expressed as long ago as the late 1800s. The risks became more evident in the late 1960s, when workers who had been heavily exposed 20 to 30 years earlier showed increased incidence of lung disease. Occupational exposure is now strictly regulated by provincial governments.

When can asbestos be a problem in the home?

Today, far fewer products in the home contain asbestos. Current products that do contain the material are better made to withstand wear and use.

However, frequent or prolonged exposure to asbestos fibres may still bring health risks. This can happen with the release of fibres into the air when asbestos-containing products break down, either through deterioration as they age or when they are cut. People can put themselves at risk — often without realizing it — if they do not take proper precautions when repairs or renovations disturb asbestoscontaining materials. This can occur in a number of situations:

- Disturbing loose-fill vermiculite insulation which may contain asbestos
- Removing deteriorating roofing shingles and siding containing asbestos, or tampering with roofing felt that contains asbestos
- Ripping away old asbestos insulation from around a hot water tank
- Sanding or scraping vinyl asbestos floor tiles
- Breaking apart acoustical ceilings tiles containing asbestos
- Sanding plaster containing asbestos, or sanding or disturbing acoustical plaster that gives ceilings and walls a soft, textured look
- Sanding or scraping older water-based asbestos coatings such as roofing compounds, spackling, sealants, paint, putty, caulking or drywall
- Sawing, drilling or smoothing rough edges of new or old asbestos materials

How to minimize the asbestos risks in the home?

If you do not know if products in your home contain asbestos, have an experienced contractor inspect them. If there is asbestos, the best interim measure (unless the product is peeling or deteriorating) is to seal the surface temporarily so that fibres will not be released into indoor air. If the product is already protected or isolated, simply leave it alone.

It is a complex and expensive matter to remove asbestos, and should be done by an experienced contractor. When disturbing an asbestos product, maximum precautions must be taken to safeguard the workers and anybody else who may be nearby. Asbestos dust must remain within the work area so that it cannot be breathed in by unprotected persons.

It is essential to take adequate precautions. Everybody who works with asbestos should always wear an approved face mask and gloves, along with protective clothing. Be sure to tape sleeve and trouser cuffs, and wash clothes separately after use. Keep the work area moist to keep dust and fibre particles from floating into the air. Isolate the work space.

Reduce the air pressure to prevent asbestos fibres from escaping from the work area, and filter the exhaust air. Dispose of all waste appropriately, according to the guidelines of your provincial department of the environment. Other removal methods may be warranted for special conditions — consult an expert.

Vermiculite Insulation

Some vermiculite may contain asbestos.

- Do not disturb loose-fill vermiculite insulation.
- Do not store items near vermiculite insulation, if the insulation can be disturbed.
- Do not allow children near loose fill vermiculite insulation.
- If activities are planned that will disturb vermiculite, consult a certified asbestos removal company.

Where can you get more information on asbestos?

For information on how to minimize exposure to asbestos refer to:

It's Your Health — Vermiculite Insulation Containing Asbestos
Health Canada

For information on occupational exposure to asbestos, contact the:

Inquiries Service Canadian Centre for Occupational Health and Safety
250 Main Street East
Hamilton, ON L8N 1H6
Phone: 1 800 263-8466
Fax: (905) 572-4500

For contractors who specialize in asbestos abatement and removal, look in the Yellow Pages™ under "Asbestos".

US EPA's Asbestos Home Page

Related CMHC Information

- Carbon Monoxide
- Assessing the Comfort and Safety of your Home's Mechanical Systems
- Wood Heat Safety in an Emergency
- Building Materials for the Environmentally Hypersensitive
- The Clean Air Guide: How to Identify and Correct Indoor Air Problems in Your Home

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