What’s the issue with asbestos-containing products in older buildings?

- Worker exposure to asbestos fibres is still the leading cause of death in BC. More workers died from asbestos-related occupational diseases between 2001 and 2011 than all other causes combined (WorkSafeBC Statistics 2011).
- An increasing number of regulations have been put in place since the late 1970s restricting the use and manufacture of products containing asbestos.
- Buildings constructed before 1990 used asbestos-containing materials and, occasionally, materials containing asbestos have been found in buildings constructed before 1995.
- Unfortunately, regulations do not list a date defining when a building is considered safe. Typically, buildings constructed after 1995 are assumed to be free of asbestos, but must still be reviewed by a qualified professional.
- Buildings with asbestos materials can continue operating with no interruptions, as long as the materials remain in good condition and undisturbed. But as buildings age, repairs, renovations or demolition become more necessary. At this time, housing providers must take precautions when asbestos-containing materials are damaged, so workers and residents will not be exposed to asbestos fibres.

What is an Asbestos Management Program?

- WorkSafeBC requires employers, including housing providers, to have an Asbestos Management Program in place if asbestos-containing materials are present.
- An Asbestos Management program is designed to identify hazards and provide instructions on how to manage them. Program components include:
  - Identifying and maintaining a current inventory of materials containing asbestos
  - Developing an exposure control plan to keep workers and the public safe from being exposed to asbestos fibres
  - Conducting a risk assessment of the potential for exposure
  - Developing safe work procedures
  - Providing education and training for staff
  - Ensuring proper waste containment and disposal
What’s involved in setting up a program?

Step 1: Conduct a Hazardous Material Survey and Inventory for each building

Have a qualified person conduct a hazardous material survey for each building. Ask your Non-Profit Portfolio Manager (NPPM) to recommend a qualified environmental or safety consultant if you’re unsure who to hire. (Consultants must meet WorkSafeBC qualification standards to perform this work.) You can use our online Terms of Reference to define the scope of work for the consultant.

During the survey, the consultant will review locations in the building to determine the variety of building materials/finishes and their condition. On average, the consultant will review 25% of the suites to get a good representation of the building. However, this numbers varies from property to property, so clarify what to expect. Residents may need to vacate the suite for 15-20 minutes while the consultant performs the inspection, so give them the required notice.

When the consultant suspects a material contains asbestos, a small sample will be collected and sent to a laboratory for analysis. Samples are typically less than 25 mm x 25 mm (1” x 1”) and should be taken from an inconspicuous location to avoid detracting from the building’s appearance.

The time to conduct a building survey varies, depending on the size of the property: a small family house can be completed in 60 to 90 minutes, 25 to 50 suites can be completed in a half-day, and large buildings could take an entire day.

The consultant will usually develop one inventory report for each property, as each is unique.

You can stop at this step if no asbestos is found.

(Cost: Consultant, $3,000 per building on average)

Step 2: Develop an Asbestos Management Program

BC Housing and the British Columbia Institute of Technology (BCIT), in partnership with the Homeowner Protection Office, have developed a 12-week, online course for housing provider health and safety personnel to create an Asbestos Management Program that complies with provincial regulations. The BCIT course is the most cost-effective option and will build internal staffing capacity. The alternative is to hire an environmental consultant to develop your program.

(Cost: BCIT, $500 for one attendee; Consultant, $3,500 on average)

Steps one and two can be bundled to save on travel expenses.

Step 3: Implement Training

Different types of training are required for different staff positions:

Asbestos Awareness Training

Staff and volunteers who work in a building with asbestos-containing materials must take awareness training to learn about the hazard. BC Housing provides this free, online training with self-paced modules covering what asbestos is, the health effects, asbestos in construction, and regulations. The training will provide a general overview of an Asbestos Management Program, plus instruction on not disturbing asbestos-containing materials and reporting any damage to trained personnel. You can contact your NPPM to arrange the training.

(BC Housing online training, no charge)
**Moderate-Risk Training**

BC Housing and the Homeowner Protection Office, in partnership with Douglas College, have developed a practical, hands-on course for maintenance personnel who come in contact with asbestos-containing materials. This three-day course will provide staff with the knowledge and skills to safely manage asbestos-containing materials so no one is exposed.

(Cost: Douglas College, various locations, approx. $1,000 per person)

Housing Providers can contact their NPPM to discuss cost implications of developing an asbestos management program.

**Here are links to relevant WorkSafeBC Occupational Health and Safety Regulations:**

- **Employers Obligations:** Part 3 (Health and Safety Program 3.1 - 3.4)
- **Asbestos Regulations:** Part 6 (Asbestos 6.1 - 6.32)
- **Protective Equipment:** Part 8 (Respirators 8.32)
- **Demolition Requirements:** Part 20 (Notice of Project 20.2 and Demolition Requirements 20.112)

**What are the consequences for not having an Asbestos Management Program?**

- WorkSafeBC can order organizations to comply with the regulations, by issuing Inspection Reports with work orders.
- In the event of a violation, WorkSafeBC can levy significant fines against an employer. In serious cases, WorkSafeBC can also take legal action against individuals.

**What happens if a building has hazardous materials?**

- Only trained personnel with the appropriate equipment and tools are to disturb asbestos.
- Determine whether the asbestos-containing material is in good condition. If so, there is no immediate health concern.
- If a building has asbestos-containing material that poses an immediate risk, there are several methods for controlling the material to ensure people are not exposed:
  - **Abatement:** Remove asbestos material and replace it with non-asbestos material,
  - **Management:** Ensure the material is not non-friable (see definition below) and kept in good condition,
  - **Encapsulate:** Provide a covering that will prevent fibres from being released, or
  - **Enclose/conceal:** Provide a solid barrier to prevent access to the asbestos material.
- Inform contractors performing work on or near building components containing asbestos of the hazard so they can take appropriate actions. You can provide a copy of the inventory sheet which summarizes known hazards and locations.
- To inform residents, include a general clause in sign-up documentation and/or notify them before a construction project begins. Generally, residents are not allowed to perform or contract work in
their suites, so materials should remain in good condition and not pose a risk. But make sure you have procedures in place to ensure residents report any damage to in-suite materials immediately.

How is the level of risk assessed?

› Have a qualified professional complete an assessment of two factors affecting the overall risk of exposure:

  • **Friability**: Material that is crumbled or powdered, or can be crumbled or powdered by hand pressure. Several common housing products are of concern due to higher friability, including ceiling texture, ceiling tiles, mechanical insulation, sheet flooring with paper backing, vermiculite and wall texture.

  • **Potential for Disturbance (low/moderate/high risk)**: Two factors affect the potential for disturbance. First, how easily could someone damage the material and release fibres by running into, hitting, brushing, kicking or impacting it in some other way? Second, what is the condition of the material? More deteriorated products can more easily release asbestos fibres.

How can we get more information?

› BC Housing has developed an online *Housing Provider Guide for a Contractor Safety Program*.

› *WorkSafeBC’s prevention office* can answer questions and provide guidance.

› The *Employers’ Advisers Office* is a BC association that communicates with employers on workers’ compensation issues.

› If you need additional assistance, your NPPM can contact BC Housing’s Hazardous Materials and Construction Occupational Health and Safety group.
Glossary of Asbestos Terms

**Asbestos Management Program**: A workplace program to identify and develop an inventory of asbestos-containing materials, risk assessment, exposure control plan, safe work procedures, staff training and waste disposal.

**Asbestos-containing material**: Any manufactured products or materials that contain 0.5% or more asbestos by weight at the time of manufacture.

**Containment**: An isolation system designed to contain asbestos fibres within a designated work area, where asbestos containing materials are handled, removed, encapsulated or enclosed. Glove bags with two arm and gloves built into the inside of the bag are one type of containment.

**Encapsulation**: Treating a material containing asbestos with a product that penetrates the material and prevents fibres from being released.

**Enclosure**: A physical barrier made of materials such as gypproc, plywood, metal or polyethylene sheeting to separate a friable material containing asbestos from the habitable environment.

**Low risk**: Working with or close to asbestos-containing material when both of the following conditions apply:

- The asbestos-containing material is not being cut, sanded, drilled, broken, ground down, fragmented or disturbed, allowing the release of airborne asbestos fibres; and
- It is unnecessary to use personal protective equipment or engineering controls to prevent worker exposure to airborne asbestos fibres.

**Moderate risk**: Working with or close to asbestos-containing material when one or both of the following conditions apply:

- The asbestos-containing material is being cut, sanded, drilled, broken, ground down, fragmented or disturbed, allowing the release of airborne asbestos fibres, and/or
- It is necessary to use personal protective equipment and/or engineering controls to prevent worker exposure to airborne asbestos fibres.

**High risk**: Working with or close to asbestos-containing material when a high level of control is required to prevent worker exposure to airborne asbestos fibres.

**BC Waste Generator Number**: A number specific to each property, required for transporting and disposing of large amounts of hazardous materials (>1000 pounds), which is regulated by the Ministry of Environment.