

Working With Asbestos

What is Asbestos?

Asbestos is a mineral with long fibres that can be separated into thin threads. Asbestos fibres are heat resistant and do not conduct electricity. Asbestos is used as an insulator and a barrier to corrosive chemicals.

Where can you find asbestos?

Asbestos is mined in a number of countries in the world, including Canada. It is then refined into a number of products. Asbestos has been used for a wide range of manufactured goods in industries such as

Construction (for example, roofing shingles, ceiling and floor tiles, paper products, asbestos cement products, paints, insulation)

Automotive (for example, clutch, gaskets, brake and transmission parts)

Textiles (for example, heat-resistant blankets and curtains, fire-resistant clothing)

How can you be exposed to asbestos?

When asbestos fibres are firmly bonded or encased in a material and cannot be released into the air, they are generally safe. When these materials break down, asbestos fibres can be released into the environment. This may occur during product use or during repair or demolition work which requires sanding, grinding, ripping or cutting.

If you work in an industry that makes or uses asbestos products, or if you work in demolition or repair of older buildings with asbestos insulation, you may be exposed to high levels of asbestos.

How can asbestos affect your health?

Breathing in asbestos fibres into your lungs increases your risk of developing several diseases.

- ◆ *Asbestosis* is scar-like tissue in the lungs caused by breathing high levels of asbestos fibres for a long time. This causes shortness of breath, coughing and permanent lung damage. Cases of asbestosis have become very rare in recent years due to efforts to control levels of exposure to asbestos.
- ◆ *Pleural plaques* are areas of thickening in the lining of the lungs from breathing in asbestos. This is now the most common effect of breathing in asbestos fibres. Pleural plaques most often do not cause any symptoms, but they may restrict breathing.
- ◆ *Mesothelioma* is a rare cancer of the membranes that line the lungs or abdomen that can occur even from breathing lower levels of asbestos.
- ◆ *Cancer of the lung* is the most common cause of death for workers who work with large amounts of asbestos and are heavy smokers. Cigarette smoking and asbestos together greatly increase the chance of getting lung cancer. If you smoke and work with asbestos, you should stop smoking.
- ◆ *Other cancers* such as esophagus, stomach, colon, rectum and ovaries have also been associated with asbestos exposure.

The risk of getting these diseases depends on how long you are exposed, and how much asbestos is in the air of the work environment.

What are the symptoms if you have been exposed to asbestos?

The symptoms of asbestos-related diseases do not usually appear until after 20-25 years from the start of exposure. See your doctor if you have any of the following symptoms and you have been exposed to asbestos:

- shortness of breath
- coughing
- blood in fluid coughed up from lungs
- pain in chest or abdomen
- difficulty swallowing
- prolonged hoarseness
- weight loss

What should your employer do?

Employers are legally responsible to provide a safe and healthy work environment for all of their employees. In workplaces where asbestos is present, employers must

- ✓ Develop a prevention plan with the workplace health and safety committee to reduce workers' exposure to asbestos fibres
- ✓ Measure the amount of asbestos fibres in work areas. In Manitoba, government guidelines state that there should be no more than 0.1 fibre of asbestos per cubic centimetre of air.
- ✓ Replace asbestos with less harmful substances where possible
- ✓ Reduce workers' exposure to asbestos fibres in these ways
 - separate, automate or enclose the work process
 - bond asbestos fibres with other materials to prevent release of dust
 - ventilate the work area with clean air
 - provide local ventilation for equipment, tools and processes to prevent release of dust
 - treat contaminated air before releasing it to the environment
 - wet asbestos products where possible before processing or handling
 - regularly clean machinery and work areas

- ✓ Provide workers with education and training on the hazards of asbestos and how to work safely with it
- ✓ Make sure approved respirators are available in the workplace for workers who may be exposed to asbestos fibres at levels greater than 0.1 fibre per cubic centimetre of air
- ✓ Provide workers with appropriate work clothing and laundering for reusable protective clothing
- ✓ Provide shower facilities with special change rooms and isolation areas to change clothes
- ✓ Keep work areas clean and free of asbestos waste using a vacuum cleaner with a high efficiency particulate air (HEPA) filter or by wet mopping, wet sweeping or wet wiping.

How can you protect yourself?

- Use an approved respirator. Make sure the respirator fits your face properly.
- Wear protective clothing, including gloves, full-body clothing, face shields and vented goggles.
- Take a shower at work at the end of your shift. Leave your work clothes at work. Your employer is responsible for washing your work clothes.
- Do not smoke.
- Do not eat, drink or smoke in the asbestos area.

For more information please contact:

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revised March 2004