

ASBESTOS EXPOSURE WHEN REPLACING BRAKE DRUMS, SHOES OR PADS

Introduction

Performing automotive, truck or heavy-duty equipment brake repair may expose you to dangerous asbestos particulate when servicing or replacing these parts. Precautions must be taken to reduce exposure. Asbestos fibres are not visible to the eye and have no taste or smell when air borne.

Hazard

Asbestos has the potential to cause lung disease – cancer being one of them. Mesothelioma (an aggressive form of cancer of the lining of the lungs or abdomen) is related to asbestos exposure.

Asbestos-related cancers are the number one cause of occupational fatalities in Ontario and Canada in various industrial sectors.

After exposure to asbestos fibres, you may not feel any immediate effects, but the disease may be slowly developing in your body. The diagnosis of cancers such as mesothelioma and lung cancer resulting from asbestos exposure usually occurs from 10 to 40 years after exposure. There are other risk factors that also increase the chance of contracting cancer, such as cigarette smoking.



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Where is asbestos found?

Asbestos may be found in brakes or machine-fit linings to brake drums, clutch linings and disc pads. The Federal ban on the importation of asbestos products will take effect in 2018 but the asbestos products already in the country will be around for many years after this date.

Vehicles produced in Canada or the U.S. don't have asbestos in the brakes when new, but may be fitted with aftermarket asbestos brake pads.



Assume that brake pads contain asbestos unless you know for sure that they don't because you have reviewed the packaging. You cannot tell if brake pads contain asbestos by looking at them.

Excessive asbestos exposure may occur during the removal of dust from brake drums and assemblies and when linings are machined before installing, servicing or replacing these parts.

How do I keep safe?

The Ontario Ministry of Labour has very specific requirements under O. Reg. 278/05 Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations to help keep workers safe. WSPS can help you understand and implement the applicable requirements.

Asbestos-related work is broken down into three types: 1, 2 and 3. Type 1 has the the lowest risk of exposure and Type 3 has the most.

It is the employer's responsibility to ensure that instruction and training in the following subjects are provided by a competent person to every worker working with asbestos:

- A. The hazards of asbestos exposure
- B. Personal hygiene and work practices
- C. The use, cleaning and disposal of respirators and protective clothing

Most brake repair operations will be classified as Type 1. They include:

1. The installation and removal of brake pads where they are installed or removed without being broken, cut, drilled, abraded, ground or sanded.

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2. The breaking, cutting, drilling, abrading, grinding or sanding of brake pads where they are wetted to control the spread of dust or fibres, and the work is done only by means of non-powered hand-held tools.

The measures and procedures that apply to Type 1 operations are set out in section 14 of O. Reg. 278/05. These required measures and procedures include:

- The removal of any visible dust on the pad or drum with a damp cloth or a vacuum equipped with a HEPA (High Efficiency Particulate Aerosol) filter before beginning the repair work. **Do not use a regular vacuum!** This will spread asbestos all over your shop as the filter bags may not be protective in containing the fine particulate.
- Controlling the spread of asbestos dust by using measures that are appropriate to the repair work, including using a drop sheet that is impervious to asbestos (e.g., polyethylene or other suitable material) which must not be reused and must be disposed of in an appropriate manner.
- Not using compressed air to clean up or remove dust from any surface (**using compressed air will spread asbestos fibres and substantially increase your exposure and those around you**).
- Not permitting eating, drinking, chewing or smoking in the work area (ingesting asbestos that falls in your drink or your food is also a hazard).
- The provision of an air-purifying half mask respirator with a P-100 particulate filter where requested by a worker.
- The provision of protective clothing as specified in the regulation when requested.
- Facilities for the washing of hands and face shall be made available to workers and shall be used by every worker when leaving the work area.



If you are performing automotive, truck or heavy-duty equipment brake work you can reduce your exposure to asbestos fibres through using the proper control measures. For help recognizing, assessing and controlling asbestos exposures, contact WSPS.

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