



## Asbestos - Automotive Brake and Clutch Repair Work

OR-OSHA is issuing this Safety and Health Hazard Alert to inform employees and employers in the automotive brake and clutch repair industry of the precautions they must take when working with automotive brakes and clutches containing asbestos. Although the use of asbestos in friction products is declining annually, it remains a substantial source of potential exposure. In addition, there is still potential exposure to asbestos in automotive brakes and clutches on older vehicles. Exposure to asbestos, if not properly controlled, can cause mesothelioma, lung cancer, and asbestosis. Symptoms may not appear for years, even decades, after contact with asbestos fibers.

### Regulatory Requirement

OR-OSHA's asbestos standard requires the use of controls and safe work practices when employees work with brake shoes and clutches that contain asbestos. These requirements are detailed in OAR 437-002-1910.1001 and specifically 1910.1001(f)(3) and Appendix F, *Work Practices and Engineering Controls for Automotive Brake and Clutch Inspection, Disassembly, Repair and Assembly*.

### OR-OSHA – Control Methods

All automotive brake and clutch repair facilities in Oregon must comply with the OR-OSHA asbestos standard. The proper use of engineering controls and work practices by properly trained employees working on automotive brakes and clutches will reduce their asbestos exposure below the permissible exposure level (PEL) of 0.1 fiber per cubic centimeter of air, expressed as an 8-hour time-weighted average.

Respiratory protection is not required during brake and clutch jobs where the control methods (listed) are used and the PEL is not exceeded.

OR-OSHA requires one of the following work methods (or an equivalent method) if a shop works on more than five pairs of brakes or five clutches per week:

- **Negative-Pressure Enclosure/HEPA Vacuum System Method:** This type of enclosure and vacuum system has a special box with clear plastic walls or windows, which fits tightly around a brake or clutch assembly to prevent asbestos exposure.
  - **Low Pressure/Wet Cleaning Method:** This specially designed low-pressure spray equipment wets down the brake assembly and catches the runoff in a special basin to prevent airborne brake dust from spreading in the work area.
- If a shop works on no more than five pairs of brakes or five clutches per week, OR-OSHA allows the following method instead:**
- **Wet Wipe Method:** This method involves using a spray bottle or other device capable of delivering a fine mist of water, or amended water (water with a detergent), at low pressure to wet all brake and clutch parts. The brakes can then be wiped clean with a cloth. The use of dry brushing during wet method operations is prohibited.

*continued on page 2*

Oregon  
**OSHA**

Oregon OSHA  
[www.orosha.org](http://www.orosha.org)  
(800) 922-2689

Hazard alerts provide information on unusual safety or health hazards or unusual or hazardous materials or practices. For more information contact the Standard and Technical Resources Section at (503) 378-3272, toll free at (800) 922-2689 or visit our Web site at [www.orosha.org](http://www.orosha.org).

# Asbestos - Automotive Brake and Clutch Repair Work — continued

## Best Practices

- **Assume** that all brakes have asbestos-type shoes.
- **Train** in the correct and most effective way to use the control system selected by the facility manager or owner.
- **Use** pre-ground, ready-to-install parts when possible.
- **Develop a maintenance program** for the system used to control brake dust.
- **Post signs** informing employees not to eat, drink, or smoke in the brake and clutch work area. Asbestos and other potentially toxic materials can be ingested or inhaled during these activities.
- **Stress personal hygiene**, such as frequent hand washing with soap or detergent.
- **Provide a laundry service** with facilities for cleaning asbestos contaminated work clothing.
- **Change** from soiled, contaminated work clothes into clean clothes before leaving work. Removing clothing provides protection against bringing asbestos into the home environment.

## Training

Training must include how to properly perform a task, how each work practice reduces potential exposure, and how employees can benefit from these practices. No matter which control system is used, employees must be trained in how to properly use it. Employees who can recognize and control hazards can better protect themselves from asbestos exposure. Frequently reinforce training and work practices.

OR-OSHA's Consultation Program can help the employer evaluate and prevent hazardous conditions that can cause injuries and illnesses.

### Resources:

OR-OSHA 1910.1002, Asbestos Standard  
[www.cbs.state.or.us/external/osha/pdf/rules/division\\_2/div2z-1001-asbestos.pdf](http://www.cbs.state.or.us/external/osha/pdf/rules/division_2/div2z-1001-asbestos.pdf)

OR-OSHA Consultation Program  
[www.cbs.state.or.us/external/osha/consultation.html](http://www.cbs.state.or.us/external/osha/consultation.html)

Federal OSHA Hazard Alert – Asbestos,  
Automotive Brake and Clutch Repair Work  
[www.osha.gov/dts/shib/shib072606.html](http://www.osha.gov/dts/shib/shib072606.html)

Environmental Protection Agency (EPA)  
[www.epa.gov/asbestos/pubs/goldbooktext.html#How](http://www.epa.gov/asbestos/pubs/goldbooktext.html#How)



Oregon OSHA  
[www.orosha.org](http://www.orosha.org)  
(800) 922-2689

