



# RISK BULLETIN

## Asbestos: Regulatory, Health and Safety Facts

The Occupational Safety and Health Administration (OSHA) has established standards to protect workers exposed to asbestos. The

current standards, located in 29 CFR 1910.1001 (General Industry) and CFR 1926.1101 (Construction), limit employee exposures to airborne asbestos. The standards apply to those directly handling asbestos products and those who may come in contact with the material when working in a facility.



### WHY IS ASBESTOS A CONCERN?

Asbestos can cause serious health problems. If inhaled, asbestos can cause lung diseases, which can disrupt the normal function of the lungs. Three specific diseases linked to asbestos exposure include asbestosis (a fibrous scarring of the lungs), lung cancer and mesothelioma (a cancer of the lining of the chest or the wall of the abdominal cavity). These diseases do not appear immediately after inhalation of the asbestos fibers; rather, it may be 20 years or more before the symptoms appear.

### WHO IS EXPOSED TO ASBESTOS?

Many businesses, which formerly manufactured

asbestos products such as pipe and boiler insulation and brake shoes, exposed their work force to asbestos on a daily basis. Today, workers potentially exposed to asbestos include asbestos abatement workers, plumbers, water utility workers, heating and air conditioning contractors, electricians and carpentry renovation/remodeling contractors. Persons working or living in buildings containing deteriorated asbestos pipe insulation or other surfacing materials such as plaster, sprayed-on fire-proofing and floor tiles also can be potentially exposed.

### WHAT DOES THE OSHA STANDARD REQUIRE?

OSHA's Asbestos Standard 29 CFR 1910.1001 applies to all employment in general industry and 29 CFR 1926.1101 applies to all employment in the construction industry. The standard limits airborne exposures to asbestos to 0.1 fibers per cubic centimeter (f/cc) with an Excursion Limit (EL) of 1.0 f/cc. Exceeding the PEL triggers a set of provisions for exposure control and medical monitoring. These provisions include personal protective equipment, employee exposure monitoring, training, medical surveillance and record-keeping.

### BRIEF OVERVIEW OF THE STANDARD

1. Employers must determine whether asbestos is used or present in the workplace.
2. If asbestos is present, employers are required to perform personal air sampling to determine employee exposure and develop a written compliance program to ensure the 8-hour time weighted average (TWA) is not exceeded.

3. All employees must be notified of the air sampling results in writing. If an employee is exposed over the TWA, initial medical surveillance, a respiratory protection program, periodic monitoring and annual training programs for exposed employees must be implemented.
4. Employers must provide protective work clothing and ensure it is worn and disposed of properly.
5. Employers must provide change and shower rooms with separate storage facilities for work clothing and street clothes to assure that employees exposed to asbestos above the PEL do not leave the workplace contaminated with asbestos.
6. Employers must provide medical surveillance for all employees exposed to asbestos concentrations above the TWA. The medical surveillance program (which includes a pre-placement medical examination) shall consist of the following criteria:
  - a) Medical history.
  - b) A complete physical examination with emphasis on the respiratory system, the cardiovascular system and the digestive tract.
  - c) Completion of a standardized questionnaire.
  - d) A chest x-ray (every 1 to 5 years, depending on age).
  - e) Pulmonary function test to include forced vital capacity, forced expiratory capacity and any other tests deemed necessary by the examining physician.
  - f) Employers must provide the physician with the following information: a copy of the OSHA Standard, a description of the employee's duties, the employee's representative exposure level, any personal protective equipment worn, and representative information from previous medical exams.

### WHAT SHOULD EMPLOYERS DO FOR THEIR EMPLOYEES AND THE GENERAL PUBLIC?

In many facilities and construction sites, adherence to proper work practices and housekeeping procedures can greatly reduce exposure to asbestos. The following recommendations may be used to reduce exposure to asbestos:

- **Maintenance:** Asbestos-containing materials should be identified, monitored and repaired to reduce potential exposures in facilities. Activities that may involve disturbing asbestos should be conducted "wet" and portable equipment should be equipped with dust-collection attachments. Containments should be erected to prevent asbestos dust from migrating to occupied areas of buildings or areas adjacent to construction sites.
- **Personal Protective Equipment:** Employees should be supplied with and wear appropriate respiratory protection, gloves, suits, and boots or shoe covers to prevent asbestos from contaminating street clothes. Contaminated clothing should be disposed of properly.
- **Personal Hygiene:** Employees who contact asbestos should be required to shower before leaving the work site.
- **Housekeeping:** Cleanups involving asbestos materials should be conducted using wet methods or involve the use of vacuums equipped with HEPA (high efficient particulate air) filters.
- **Labeling:** Asbestos-containing materials should be labeled to alert employees to the materials' composition.

*The information contained herein is intended for informational purposes only and does not constitute legal advice. For legal advice, seek the services of a competent attorney. Any descriptions of insurance provisions are general overviews only.*

*"XL Insurance" is the global brand used by XL Group plc's (NYSE: XL) insurance companies. Coverages underwritten by Greenwich Insurance Company, Indian Harbor Insurance Company, XL Insurance America, Inc., XL Specialty Insurance Company and XL Insurance Company Limited—Canadian Branch. Coverages not available in all jurisdictions.*



XL Environmental  
Risk Control Division  
505 Eagleview Boulevard  
Suite 100  
PO Box 636  
Exton, PA 19341-0636  
Phone: 800-327-1414  
Fax: 610-458-7285  
[www.xlenvironmental.com](http://www.xlenvironmental.com)

*XL Environmental is a Division of XL Specialty Insurance Company.*