Asbestos Standard for General Industry

U.S. Dept of Labor Occupational Safety & Health Administration 200 Constitution Avenue Washington, DC 20210

OSHA 3095

Approved for public release, distribution unlimited

Abstract
Asbestos is a widely used, mineral-based material that is resistant to heat and corrosive chemicals. Depending on the chemical composition, fibers may range in texture from coarse to silky. The properties that make asbestos fibers so valuable to industry are its high-tensile strength, flexibility, heat and chemical resistance, and good frictional properties. Asbestos fibers enter the body by inhalation of airborne particles or by ingestion and can become embedded in the tissues of the respiratory or digestive systems. Years of exposure to asbestos can cause numerous disabling or fatal diseases. Among these diseases are asbestosis, an emphysemalike condition; lung cancer; mesothelioma, a cancerous tumor that spreads rapidly in the cells of membranes covering the lungs and body organs; and gastrointestinal cancer. Since 1972, however, OSHA has regulated asbestos exposure in general industry thereby causing a significant decline in the use of asbestos-containing materials. The revised standard continues to protect workers, in general, who are exposed to asbestos-containing materials but now includes provisions that apply to workers performing brake and clutch repair and to those doing housekeeping in buildings and facilities where asbestos-containing materials exist.
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This informational booklet is intended to provide a generic, non-exhaustive overview of a particular standards-related topic. This publication does not itself alter or determine compliance responsibilities, which are set forth in OSHA standards themselves and the *Occupations Safety and Health Act*. Moreover, because interpretations and enforcement policy may change over time, for additional guidance on OSHA compliance requirements, the reader should consult current administrative interpretations and decisions by the Occupational Safety and Health Review Commission and the courts.

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This information will be made available to sensory impaired individuals upon request. Voice phone (202) 219-8615; Telecommunications Device for the Deaf (TDD) message referral phone: 1-800-326-2577.
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Introduction

Asbestos is a widely used, mineral-based material that is resistant to heat and corrosive chemicals. Depending on the chemical composition, fibers may range in texture from coarse to silky. The properties that make asbestos fibers so valuable to industry are its high-tensile strength, flexibility, heat and chemical resistance, and good frictional properties.

Asbestos fibers enter the body by inhalation of airborne particles or by ingestion and can become embedded in the tissues of the respiratory or digestive systems. Years of exposure to asbestos can cause numerous disabling or fatal diseases. Among these diseases are asbestosis, an emphysemalike condition; lung cancer; mesothelioma, a cancerous tumor that spreads rapidly in the cells of membranes covering the lungs and body organs; and gastrointestinal cancer.

Since 1972, however, OSHA has regulated asbestos exposure in general industry thereby causing a significant decline in the use of asbestos-containing materials. The revised standard continues to protect workers, in general, who are exposed to asbestos-containing materials but now includes provisions that apply to workers performing brake and clutch repair and to those doing housekeeping in buildings and facilities where asbestos-containing materials exist.

This booklet contains an overview of the Occupational Safety and Health Administration's (OSHA's) worker protection requirements for exposure to asbestos in general industry and describes the steps an employer must take to reduce the levels of asbestos in the workplace. The revised rule lowers the permissible exposure limit (PEL), contains mandatory methods of control for brake and clutch repairs, and provides training provisions for maintenance and custodial workers. (OSHA has developed a separate standard and a separate pamphlet for asbestos in the construction industry. See Related Publications at the end of this publication for details on how to order.)
Scope and Application

OSHA’s revised standards for asbestos were developed in recognition of the vastly different conditions prevailing in the workplaces for general industry (29 Code of Federal Regulations (CFR) Part 1910.1001), for the shipyard industry (29 CFR Part 1915), and for the construction industry (29 CFR Part 1926-1101). The information in this pamphlet applies to all occupational exposure to asbestos in general industry.

More than 685,000 workers in general industry, mostly in auto repair, are affected by the new standard. OSHA estimates, conservatively, that about 42 additional cancer deaths per year will be avoided in all industries, in addition to the lives saved of those peripherally exposed to asbestos and the lives saved by earlier OSHA standards.

Provisions of the Standard

OSHA sets out several provisions employers must follow to comply with the asbestos standard. The agency has established strict exposure limits and guidelines for exposure monitoring, medical surveillance, record keeping, regulated areas, and communication of hazards.

Permissible Exposure Limits (PELs)

*Time-Weighted Average (TWA)* - The employer shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 0.1 fiber per cubic centimeter of (1 f/cc) as averaged over an 8-hour TWA day.

*Excursion Limit (ELT)* - The employer shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 1.0 fiber per cubic centimeter of air (0.1 f/cc) as averaged over a sampling period of 30 minutes.

OSHA has adopted the term "excursion limit" to refer to the short-term permissible exposure limit to be consistent with the terminology used by the American Conference of Governmental Industrial Hygienists (ACGIH).
Exposure Monitoring

Except for brake and clutch repair where a "preferred" control method is used, each employer who has a workplace or work operation covered by this standard must assess all asbestos operations for their potential to generate airborne fibers. Where exposure may exceed the PEL, employee exposure measurements must be made from breathing zone air samples representing the 8-hour TWA and 30-minute EL for each employee.

Initial monitoring also must be performed for all employees who are, or may reasonably be expected to be, exposed to airborne concentrations of asbestos at or above the PEL and/or EL unless: (1) monitoring results conducted after March 31, 1992, meet all other standard-related requirements; and (2) the collected data demonstrate that asbestos is not capable of being released in airborne concentrations at or above the PEL and/or EL when materials are being processed, used, or handled. If initial monitoring indicates that exposures are above the PEL and/or EL, periodic monitoring must be conducted at intervals no greater than every 6 months. If either initial or periodic monitoring statistically indicates that employee exposures are below the PEL and/or EL, the employer may discontinue monitoring for those employees whose exposures are represented by such monitoring.

The employer must reinitiate monitoring whenever there has been a change in the production, process, control equipment, personnel or work practices that may result in new or additional exposures to asbestos above the PEL and/or EL, or when the employer has reason to suspect that a change may result in new or additional exposures above the PEL and/or EL.

Affected employees and their representatives must be allowed to observe monitoring and must be notified in writing, either individually or by posting results in an accessible location within 15 working days after the receipt of the results of monitoring. This written notification must contain the corrective action being taken by the employer to reduce employee exposure to asbestos on or below the PEL and/or EL wherever monitoring results indicate that the PEL and/or EL has been exceeded. If monitoring is being observed in a regulated area, the observer must be provided proper protective clothing and equipment.
Medical Surveillance

The employer must institute a medical surveillance program for all employees who are or will be exposed to airborne concentrations of asbestos at or above the PEL and/or EL. All medical examinations and procedures must be performed by or under the supervision of a licensed physician. Such exams must occur at a reasonable time and place and shall be provided at no cost to the employee. At a minimum, such examinations must include a medical and work history; a complete physical examination with emphasis on the respiratory system, the cardiovascular system, and the digestive tract; a chest X-ray; pulmonary function tests; respiratory disease standardized questionnaire as set forth in 29 CFR 1910.1001 Appendix D, Part I of the standard; and any additional tests deemed appropriate by the examining physician. These examinations must be made available annually. Chest roentgenogram must be conducted in accordance with the following table:

<table>
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<th>Years since first exposure</th>
<th>Age of employee</th>
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<td>15 to 35</td>
<td>35+ to 45</td>
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<tr>
<td>0 to 10</td>
<td>Every 5 years</td>
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<tr>
<td>10+</td>
<td>Every 5 years</td>
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Also, an abbreviated standardized questionnaire (see 29 CFR Part 1 910.1001 Appendix D Part 2 of the standard) also must be administered to the employee. Upon termination of employment, the employer must provide a termination of employment medical exam to the employee within 30 calendar days before or after the date of termination.

If adequate records exist that show the employee has been examined in accordance with the standard within the past year, no additional medical examination is required. A preemployment medical examination may not be used unless the employer pays for it.

The employer must provide the examining physician with a copy of the standard and Appendices D and E; a description of the affected employee’s duties as they relate to his or her asbestos
exposure; the employee's actual or anticipated exposure level; a description of any personal protective and respiratory equipment used or to be used; and information from previous medical examinations. Once the physician has completed the exam, the employer must obtain a written signed opinion from the physician. It must contain the results of the medical examination and the physician's opinion as to whether the employee has any detailed medical conditions that would place the employee at an increased risk from exposure to asbestos; any recommended limitations on the employee or upon the use of personal protective equipment such as respirators, a statement that the employee has been informed by the physician of the results of the examination, and a statement that the employee has been informed by the physician of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure.

The physician is not to reveal in the written opinion given to the employer specific findings or diagnoses unrelated to occupational exposure to asbestos.

The employer must provide a copy of the physician's written opinion to the affected employee within 30 days of its receipt.

Recordkeeping

The employer must keep an accurate record of all exposure measurements taken to monitor employee exposure to asbestos. This record must be kept for 30 years.

The employer also must maintain an accurate record for each employee subject to medical surveillance. This record must be maintained for the duration of employment plus 30 years.

In addition, the employer must maintain all employee training records for 1 year beyond the last date of employment by the employee.

All records must be made available to the OSHA Assistant Secretary, the Director of the National Institute for Occupational Safety and Health (NIOSH), affected employees, former employees, and designated representatives in accordance with 29 CFR Part 1910.20. When the employer ceases to do business and there is no successor to receive the records for the prescribed period, the employer must notify the Director of NIOSH at least 90 days prior to the disposal of records.
Also, if handling, using, or processing any products made from or containing asbestos are exempted, the employer must establish and maintain accurate records of objective data that exempt these products. These records must be kept for the duration of products. These be kept for way duration vu of the employer's reliance upon the data.

Building and facility owners also are required to maintain records about the presence, quantity of asbestos-containing material and presumed asbestos-containing material in the building and/or facility. These records must be kept for duration of ownership and must be transferred to the successive owners.

Regulated Areas

The employer must establish and set apart a regulated area wherever airborne concentrations of asbestos and/or presumed asbestos-containing material exceed the PEL and/or EL. Only authorized personnel may enter regulated areas. All persons entering a regulated area must be supplied with and are required to an appropriate respirator.

No smoking, eating, drinking, chewing tobacco or gum, or applying cosmetics is permitted in regulated areas.

Warning signs must be provided and displayed at each regulated area and must be posted at all approaches to all regulated areas. Where necessary, signs must bear pictures or graphics, or be written in appropriate language so that all employees understand them. These signs must bear the following information:

<table>
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<tr>
<td>Asbestos</td>
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<tr>
<td>Cancer And Lung Disease Hazard</td>
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<tr>
<td>Authorized Personnel Only</td>
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<tr>
<td>Respirators And Protective Clothing</td>
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<td>Are Required In This Area</td>
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In addition, warning labels must be affixed to all asbestos products (raw materials, mixtures, scrap) and to all containers of asbestos products, including waste containers, that may be in the workplace. The labels must comply with the requirements of 29 CFR 1910.1200(f) of OSHA's Hazard Communication standard and must include the following information:
Danger
Contains Asbestos Fibers
Avoid Creating Dust
Cancer And Lung Disease Hazard

Labels or Material Safety Data Sheets (MSDSs) are not required where asbestos fibers have been modified by a bonding agent, coating, binder, or other materials, if the manufacturer can demonstrate that during handling, storing, disposing, processing, or transporting no airborne concentrations of fibers of asbestos in excess of PEL and/or EL will be released or if asbestos is present in a product in a concentration of less than 1.0 percent.

Communication of Hazards

Building/Facility Owners Duties

The communication of asbestos hazards is vital. Employees engaged in housekeeping activities in public and commercial buildings with installed asbestos-containing materials may be exposed to asbestos fibers. Building owners are often the only and/or best source of information concerning that presence of previously installed asbestos-containing building materials. The standard requires building owners and employers or potentially exposed employees to institute the following practices:

- In buildings built before 1980, treat thermal system insulation and sprayed-on and troweled-on surfacing materials as asbestos-containing materials, unless properly analyzed and found not to contain more than 1 percent asbestos.
- Train employees who may be in contact with asbestos-containing materials to deal safely with them.
- Treat asphalt and vinyl flooring materials installed no later than 1980 as asbestos-containing, unless properly analyzed and found to contain no more than 1 percent asbestos.
- Inform employers of employees performing housekeeping activities of the presence and location of asbestos-containing materials and presumed asbestos-containing materials that may have contaminated the area.
• Keep records of the presence, location, and quantity of asbestos-containing materials and presumed asbestos-containing materials present in the building for the duration of ownership and transfer these records to a successive owner.

**Information and Training**

Employers must develop a training program for all employees who are exposed to airborne concentrations of asbestos at or above the PEL and/or EL. Training must be provided prior to or at the time of initial assignment and at least yearly thereafter. The training program must inform employees about ways in which they can safeguard their health.

In addition, employers must provide an awareness training course for employees who do housekeeping operations in facilities where asbestos-containing materials or presumed asbestos-containing materials are present. The elements of the course must include the health effects of asbestos; locations, signs of damage and deterioration of asbestos-containing materials and presumed asbestos-containing materials; the proper response to fiber release episodes; and where the housekeeping requirements are found in the standard. This training must be held annually and conducted so that all employees understand it.

Also, all training materials must be available to the employees without cost and, upon request, to the Assistant Secretary for OSHA and the Director of NIOSH.

**Methods of Compliance**

**Control Methods**

To the extent feasible, engineering gild work practice controls must be used to reduce and maintain employee exposure at or below the PEL and/or EL. The standard, therefore, requires the employer to institute the following measures:

- Provide a local exhaust ventilation system for all hand-operated and power-operated tools such as saws, scorers, abrasive wheels, and drills that produce or release fibers of asbestos.
• Handle, mix, apply, remove, cut, score, or work asbestos in a wet state to prevent employee exposure.
• Do not remove cement, mortar, coating, grout, plaster, or similar materials containing asbestos from bags, cartons, or other containers that are being shipped without wetting, enclosing, or ventilating them.
• Do not sand floors containing asbestos.
• Do not use compressed air to remove asbestos or materials containing asbestos unless the compressed air is used in conjunction with a ventilation system designed to capture the dust cloud created by tile compressed air.
• Use a negative-pressure enclosure/HEPA¹ vacuum system or a low-pressure/wet cleaning method during automotive brake and clutch inspection, disassembly, repair, and assembly operations. An equivalent method also can be used if the employer demonstrates that the method being used achieves the required exposure reductions. (See 29 Part 1910.1001 Appendix F, Part C to the standard.)
• Where no more than five pairs of brakes or five clutches are inspected, disassembled, repaired, or assembled weekly, use the control methods or work practices as set forth in 29 CFR Part 1910.1001 Appendix F to the standard.

Where engineering and work practice controls have been insufficient to reduce exposure to the required level the employer must supplement them by using respiratory protection.

Where the PEL and/or EL is exceeded the employer must establish and implement a written program to reduce employee exposure below the engineering and work practice controls and by the use of respirators where required and permitted.

Written plans for the program must be available upon request to the Assistant Secretary for OSHA, the Director of NIOSH, and employees and their representatives. These plans must be reviewed and updated, as necessary, to reflect significant changes in the compliance program.

Employee rotation can be used as a means of compliance the PEL and/or the EL.

¹High-efficiency particulate air means a filter capable of trapping and retaining at least 99.97 percent of 0.3-micrometer diameter mono-disperse particles.
Respiratory Protection

Respirators must be selected, provided, and used in the following circumstances:

- While feasible engineering and work practice controls are being installed or implemented;
- During maintenance and repair activities, or other activities where engineering and work practice controls are not feasible;
- In work situations where feasible engineering and work practice controls are not yet sufficient to reduce exposure to or below the PEL and/or EL; and
- In emergencies.

Respirators must be selected from among those jointly approved by the Mine Safety and Health Administration (MSHA) and NIOSH under the provisions of Title 30, CFR Part 11. The employer also must provide a powered, air-purifying respirator in lieu of any negative-pressure respirator when the employee chooses it and when the respirator provides adequate protection. And, where respiratory protection is required, the employer must develop a respiratory program in accordance with 29 CFR 1910.134 (b),(d),(e), and (f). The respirators and the respiratory protection program must be provided to employees free of charge.

Employees who use a filter respirator must use a high-efficiency filter and must change filters whenever an increase in breathing resistance is detected. Employees who wear respirators must be allowed to wash their faces and respirator face pieces whenever necessary to prevent skin irritation associated with respirator use. An employee must not be assigned to tasks requiring the use of respirators if a physician determines that the employee is unable to function normally wearing a respirator or that the employee's safety and health or that of others would be affected by the employee's use of a respirator. In this case, the employer must assign the employee to another job or give the employee the opportunity to transfer to a different job that does not require the use of a respirator. The job must be with the same employer, in the same geographical area, and with the same seniority, status, rate of pay, if such a position is available.

The employer must ensure that a respirator issued to an employee fits properly exhibits and minimum facepiece leakage. Employers also must perform quantitative or qualitative fit tests.
whichever are appropriate, at the time of initial fitting and at least every 6 months for each employee wearing negative-pressure respirators. Protocols for fit tests are set forth in 29 CFR 1910.1001 Appendix C of the standard. Tests must be used to select facepieces that provides required protection.

**Protective Clothing**

For any employee exposed to airborne concentrations of asbestos that exceed the PEL and/or EL, employer must provide at no cost to the employee, and require the use of, protective clothing, such as coveralls or similar full-body clothing, head coverings, gloves, and foot coverings. In addition, wherever the possibility of eye irritation exists, face shields, vented goggles, or other appropriate protective equipment must be provided and worn. Asbestos-contaminated work clothing must be removed in change rooms and placed and stored in closed, labeled containers that prevent dispersion of the asbestos into the ambient environment. Protective clothing and equipment must be cleaned, laundered, repaired, or replaced to maintain effectiveness.

The employer must provide clean protective clothing and equipment at least weekly to each affected employee. The employer must inform any person who launders or cleans asbestos-contaminated clothing or equipment of the potentially harmful effects of exposure to asbestos. In addition, the employer must be certain that the person doing the cleaning or laundering has been properly instructed on how to effectively prevent the release of airborne fibers in excess of the permissible exposure limits. For example, asbestos must never be removed from protective clothing by means of blowing or shaking.

Contaminated clothing and equipment taken out of change rooms or the workplace for cleaning, must be transported in sealed impermeable bags, or other closed impermeable containers and must be appropriately labeled.

**Hygiene Facilities and Practices**

Employees who are required to work in regulated areas must be provided with clean change rooms, shower facilities, and lunch rooms. Change rooms must have two separate lockers or storage facilities -- one for contaminated clothing, the other for street clothing.
They must be far enough apart to prevent accidental contamination of the employee's street clothes. Employees must shower at the end of the shift and cannot leave the workplace wearing any clothing or equipment worn during the work shift. Lunchroom facilities must have a positive-pressure filtered air supply and must be readily accessible to employees.

The employer must ensure that employees do not enter lunch room facilities with protective work clothing or equipment unless surface asbestos fibers have been removed by vacuuming or some other method that removes dust without causing the asbestos to become airborne. The employer also must ensure that employees wash their hands prior to eating, drinking, or smoking. Smoking is prohibited in regulated areas.

**Housekeeping**

All surfaces must be maintained as free as possible of accumulations of waste containing asbestos and/or asbestos dust. The preferred methods of cleanup are wet cleaning and/or vacuuming with HEPA filtered vacuuming equipment. Compressed air may not be used to clean surfaces contaminated by asbestos at any time. Whichever cleanup method is chosen, the equipment shall be used and emptied in a manner that minimizes the reentry of asbestos into the workplace.

The employer also must ensure that all spills and sudden releases of asbestos-containing materials are immediately cleaned up, that sanding asbestos-containing floors is prohibited; and that low abrasion pads at speeds lower than 300 rpm and wet methods are used. If floor has sufficient finish, brushing or dry buffing is permissible. If workers are required to buff or wax asbestos containing resilient floors, building and facility owners must identify the installed material and inform employees and employers of employees doing such housekeeping work.

Asbestos waste, scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing consigned for disposal must be collected and disposed of in sealed, labeled, impermeable bags or other closed, labeled impermeable containers.
Other Sources of OSHA Assistance

Safety and Health Program Management Guidelines

Effective management of worker safety and health protection is a decisive factor in reducing the extent and severity of work-related injuries and illnesses and their related costs. To assist employers and employees in developing effective safety and health programs, OSHA published recommended. Safety and Health Program Management Guidelines (Federal Register 54 (18): 3908-3916, January 26, 1989). These voluntary guidelines apply to all places of employment covered by OSHA.

The guidelines identify four general elements that are critical to the development of a successful safety and health management program:

- Management commitment and employee involvement,
- Worksite analysis,
- Hazard prevention and control, and
- Safety and health training.

The guidelines recommend specific actions, under each of these general elements to achieve an effective safety and health program. A single free copy of the guidelines can be obtained from the OSHA Publications Office, U.S. Department of Labor, 200 Constitution Avenue, N.W., Room N3101, Washington, DC 20210, by sending a self-addressed mail label with your request.

State Programs

The Occupational Safety and Health Act of 1970 encourages states to develop and operate their own job safety and health plans. States with plans approved under section 18(b) of the Act must adopt standards and enforce requirements that are at least as effective as federal requirements. There are currently 25 state plan states: 23 of these states administer plans covering both private and public (state and local government) employees; the other 2 states; Connecticut and New York, cover public employees only. Plan states must adopt standards at least as effective as federal requirements within 6 months of a federal standard's promulgation. Until such time as a state standard is promulgated, federal OSHA provides interim enforcement assistance, as appropriate, in these states. A listing of approved state plans appears at the end of this publication.
Consultation Services

Consultation assistance is available on request to employers who want help in establishing and maintaining a safe and healthful workplace. Largely funded by OSHA, the service is provided at no cost to the employer. Primarily developed for smaller employers with more hazardous operations, the consultation service is delivered by state government agencies or universities employing professional safety consultants and health consultants. Comprehensive assistance includes an appraisal of all mechanical, physical work practices, and environmental hazards of the workplace and all aspects of the employer's present job safety and health program.

The program is separate from OSHA's inspection efforts. No penalties are proposed or citations issued for any safety or health problems identified by the consultant. The service is confidential.

For more information concerning consultation assistance, see the list of consultation projects at the end of this publication.

Voluntary Protection Programs (VPPs)

Voluntary Protection Programs and onsite consultation services, when coupled with an effective enforcement program, expand worker protection to help meet the goals of the OSH Act. The three VPPs -- Star, Merit, and Demonstration -- are designed to recognize outstanding achievement by companies that have successfully incorporated comprehensive safety and health programs into their total management system. They motivate others to achieve excellent safety and health results in the same outstanding way as they establish a cooperative relationship among employers, employees, and OSHA.

For additional information on VPPs and how to apply, contact the OSHA area or regional offices listed at the end of this publication.

Training and Education

OSHA area offices offer a variety of information services, such as publications, audiovisual aids, technical advice, and speakers for special engagements. OSHA Training Institute in Des Plaines, IL, provides basic and advanced courses in safety and health for federal and state compliance
officers, state consultants, federal agency personnel, and private sector employers, employees, and their representatives.

OSHA also provides funds to nonprofit organizations, through grants, to conduct workplace training and education in subjects where OSHA believes there is a lack of workplace training. Grants are awarded annually. Grant recipients are expected to contribute 20 percent of the total grant cost.

For more information on grants, training and education, contact the OSHA Training institute, Office of Training and Education, 1555 Times Drive, Des Plaines, IL 60018, (708) 297-4810.

For further information on any OSHA program, contact your nearest OSHA area or regional office listed at the end of this publication.
OSHA Related Publications

A single free copy of the following materials may be obtained from the OSHA area or regional offices or contact the OSHA Publications Office, 200 Constitution Avenue, N.W., Room N3101, Washington, DC 20210, (202) 219-4667; or (202) 219-9266 (fax). Please send a self-addressed label with your written request.

All About OSHA – OSHA 2056

Asbestos Standard for Construction Industry - OSHA 3096

Asbestos Standard for Shipyards - OSHA 3145

Chemical Hazard Communication - OSHA 3084

Consultation Services for the Employer - OSHA 3047

How to Prepare for Workplace Emergencies- OSHA 3088

Job Safety and Health Protection (Poster) - OSHA 2203

OSHA: Employee Workplace Rights - OSHA 3021

OSHA Inspections - OSHA 2098

Personal Protective Equipment - OSHA 3077

Respiratory Protection – OSHA 3079

**Hazard Communication-A Compliance Kit - OSHA 3104**
OSHA Order No. 029-010-00147-6. Cost $18.00 domestic; $22.50 foreign.

**Hazard Communication Guidelines for Compliance - OSHA 3111**
Order No.029-016-00127-1. Cost $1.00

**Job Hazard Analysis - OSHA 3071**
Order No. 029-016-00142-5. Cost: $1.00

**Training Requirements in OSHA Standards and Training Guidelines - OSHA 2254**
States with Approved Plans

**Commissioner**
Alaska Department of Labor
1111 West 8th Street
Room 306
Juneau AK 99801
(907) 465-2700

**Commissioner**
Indiana Department of Labor
State Office Building
402 West Washington Street
Room W195
Indianapolis, IN 46204
(307) 232-2378

**Director**
Industrial Commission of
Arizona
800 W. Washington
Phoenix, AZ 85007
(602) 542-5795

**Director**
California Department
of Industrial Relations
455 Golden Gate Avenue
4th Floor
S. San Francisco, CA 94102
(415) 703-4590

**Commissioner**
Connecticut Department
of Labor
200 Folly Brook Boulevard
Wethersfield, CT 06109
(203) 566-5123

**Commissioner**
Hawaii Department of Labor
and Industrial Relations
830 Punchbowl Street
Honolulu, HI 96813
(808) 586-8844

**Commissioner**
Iowa Division of Labor Services
1000 E. Grand Avenue
Des Moines, IA 50319
(515) 281-3447

**Secretary**
Kentucky Labor Cabinet
1049 U.S. Highway, 127 South
Frankfort, KY 40601
(502) 564-3070

**Commissioner**
Maryland Division of Labor
and industry
Department of Licensing
and Regulation
501 St. Paul Place, 2nd Floor
Baltimore, MD 21202-2272
(410) 333-4179

**Director**
Michigan Department of Labor
Victor Office Center
201 N. Washington Square
P.O. Box 30015
Lansing, MI 48933
(517) 373-9600
Director
Michigan Department of Public Health
3423 North Logan Street
Box 30195
Lansing, MI 48909
(517) 335-8022

Commissioner
Minnesota Department of Labor and industry
443 Lafayette Road
St. Paul, MN 55155
(612) 296-2342

Director
Division of industrial Relations
400 West King Street
Carson City, NV 89710
(702) 687-3032

Secretary
New Mexico Environmental Department
Occupational Health and Safety Bureau
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, NM 87502
(505) 827-7850

Commissioner
New York Department of Labor
State Office Building – Campus 12
Room 457
Albany, NY 12240
(518) 457-2741

Commissioner
North Carolina Department of Labor
319 Chapanoke Road
Raleigh, NC 27603
(919) 662-4585

Administrator
Oregon Occupational Safety and Health Division
Department of Consumer and Business Services,
Room 430
Labor and Industries Building
350 Winter Street, NE
Salem, OR 97310
(503) 378-272

Secretary
Puerto Rico Department of Labor and Human Resources
Prudencio Rivera Martinez. Building
505 Munoz Rivera Avenue
Hato Rey, PR 00918
(809) 754-2119

Commissioner
South Carolina Department of Labor
3600 Forest Drive
P.O. Box 11329
Columbia, SC 29211-1329
(803) 734-9594
Commissioner
Tennessee Department of Labor
Attention: Robert Taylor
710 James Robertson Parkway
Gateway Plaza
Suite “A”- 2nd Floor
Nashville, TN 37243-0655
(615) 741-2582

Commissioner
Industrial Commission of Utah
160 East 300 South, 3rd Floor
P.O. Box 146600
Salt Lake City, UT 84114-6600
(801) 530-6880

Commissioner
Vermont Department of Labor and Industry
120 State Street
Montpelier, VT 05620
(802) 828-2788

Commissioner
Virgin Islands Department of Labor
2131 Hospital Street, Box 890
Christiansted
St. Croix, VI 00840-4666
(809) 773-1994

Commissioner
Virginia Department Department of Labor and industry
Powers-Taylor Building
13 South 13th Street
Richmond, VA 23219
(804) 786-9873

Director
Washington Department of Labor and Industries
P.O. Box 44000
Olympia, WA 98504-4000
(206) 956-4200

Administrator
Occupational Safety and Health Administration
Herschler Building,
2nd Floor East
122 West 25th Street
Cheyenne, WY 82002
(307) 777-7786
## OSHA Consultation Project Directory

<table>
<thead>
<tr>
<th>State</th>
<th>Telephone</th>
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<tbody>
<tr>
<td>Alabama</td>
<td>(205) 348 - 3033</td>
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<tr>
<td>Alaska</td>
<td>(907) 269 - 4939</td>
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<tr>
<td>Arizona</td>
<td>(602) 542 - 5795</td>
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<tr>
<td>Arkansas</td>
<td>(501) 682 - 4522</td>
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<tr>
<td>California</td>
<td>(415) 703 - 4441</td>
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<tr>
<td>Colorado</td>
<td>(303) 491 - 6151</td>
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<tr>
<td>Connecticut</td>
<td>(203) 566 - 4550</td>
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<tr>
<td>Delaware</td>
<td>(302) 577 - 3908</td>
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<tr>
<td>District of Columbia</td>
<td>(202) 576 - 6339</td>
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<tr>
<td>Florida</td>
<td>(904) 488 - 3044</td>
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<td>Georgia</td>
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<td>Guam</td>
<td>(671) 647 - 4202</td>
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<td>Hawaii</td>
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<td>Idaho</td>
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<td>(410) 333 - 4218</td>
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<td>(517) 322 - 1809 (S)</td>
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<td>(919) 733 - 2360</td>
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<td>(701) 221 - 5188</td>
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(H) - Health
(S) - Safety
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<td>Oklahoma</td>
<td>(405) 528 - 1500</td>
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<td>Oregon</td>
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<td>(412) 357 - 2396</td>
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<td>(809) 754 - 2171</td>
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<td>(512) 440 - 3834</td>
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<td>Wyoming</td>
<td>(307) 777 - 7786</td>
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(H)-Health
(S)-Safety
## OSHA Area Offices

<table>
<thead>
<tr>
<th>Area</th>
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<tbody>
<tr>
<td>Albany, NY</td>
<td>(518) 464 - 6742</td>
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<tr>
<td>Albuquerque, NM</td>
<td>(505) 766 - 3411</td>
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<td>Allentown, PA</td>
<td>(215) 776 - 0592</td>
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<td>Anchorage, AK</td>
<td>(907) 271 - 5152</td>
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<td>Appleton, WI</td>
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<td>Augusta, ME</td>
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<td>Austin, TX</td>
<td>(512) 482 - 5783</td>
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<td>Avenel, NJ</td>
<td>(908) 750 - 3270</td>
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<td>Baltimore, MD</td>
<td>(410) 962 - 2840</td>
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<td>Baton Rouge, LA</td>
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<td>Bayside, NY</td>
<td>(718) 279 - 9060</td>
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<td>Bellevue, WA</td>
<td>(206) 553 - 7520</td>
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<td>Billings, MT</td>
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<td>Birmingham, AL</td>
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<td>Bowmansville, NY</td>
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<td>Braintree, MA</td>
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<td>Bridgeport, CT</td>
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<td>Calumet City, IT</td>
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<td>Carson City, NV</td>
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<td>Concord, NH</td>
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<td>Corpus Christi, TX</td>
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<td>Dallas, TX</td>
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<td>Denver, CO</td>
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<td>Des Plaines IT</td>
<td>(708) 803 - 4800</td>
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<td>Erie, PA</td>
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<td>Fort Lauderdale, FL</td>
<td>(305) 424 - 0242</td>
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<td>Fort Worth, TX</td>
<td>(817) 885 - 7025</td>
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<td>Frankfort, KY</td>
<td>(502) 227 - 7024</td>
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<tr>
<td>Harrisburg, PA</td>
<td>(717) 782 - 3902</td>
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<td>Hartford, CT</td>
<td>(203) 240 - 3152</td>
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<td>Hasbrouck Heights, NJ</td>
<td>(201) 288 - 1700</td>
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<tr>
<td>Hato Rey, PR</td>
<td>(809) 766 - 5 457</td>
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</table>
Honolulu, HI ...........................................(808) 541 - 2685
Houston, TX .........................................(713) 286 - 0583
Houston, TX .........................................(713) 591 - 2438
Indianapolis, IN ......................................(317) 226 - 7290
Jackson, MS ...........................................(601) 965 - 4606
Jacksonville, FL .....................................(904) 232 - 2895
Kansas City, MO .....................................(816) 426 - 2756
Lansing, MI ...........................................(517) 377 - 1892
Little Rock, AR .......................................(501) 324 - 6291
Lubbock, TX ...........................................(806) 743 - 7681
Madison, WI ..........................................{(608) 264 - 5388
Marlton, NJ ..........................................{(609) 757 - 5181
Methuen, MA .........................................(617) 565 - 8110
Milwaukee, WI .......................................(414) 297 - 3315
Minneapolis, MN ....................................(612) 348 - 1994
Mobile, AL ..........................................{(205) 441 - 6131
Nashville, TN .......................................{(615) 781 - 5423
New York, NY .......................................{(212) 264 - 9840
Norfolk, VA .........................................{(804) 441 - 3820
North Aurora, IL ....................................{(708) 896 - 8700
Oklahoma City, OK ................................{(405) 231 - 5351
Omaha, NE ..........................................{(402) 221 - 3182
Parsippany, NJ ......................................{(201) 263 - 1003
Peoria, IL .............................................{(309) 671 - 7033
Philadelphia, PA .................................{(215) 597 - 4955
Phoenix, AZ .........................................{(602) 640 - 2007
Pittsburgh, PA .......................................{(412) 644 - 2903
Portland, OR .........................................{(503) 326 - 2251
Providence, RI .......................................{(401) 528 - 4669
Raleigh, NC .........................................{(919) 856 - 4770
Salt Lake City, UT ................................{(801) 524 - 5080
San Francisco, CA ................................{(415) 744 - 7120
Savannah, GA .......................................{(912) 652 - 4393
Smyrna, GA .........................................{(404) 984 - 8700
Springfield, MA .....................................{(413) 785 - 0123
St. Louis, MO ........................................{(314) 425 - 4249
Syracuse, NY .........................................{(315) 451 - 0808
Tampa, FL .............................................{(813) 626 - 1177
Tarrytown, NY ......................................{(914) 682 - 6151
Toledo, OH ...........................................(419) 259 - 7542
Tucker, GA ...........................................(404) 493 - 6644
Westbury, NY .......................................{(516) 334 - 3344
Wichita, KS ..........................................{(316) 269 - 6644
Wilkes-Barre, PA ....................................{(717) 826 - 6538

24
Region I
(CT,* MA, ME, NH, RI, VT*)
133 Portland Street
1st Floor
Boston, MA 02114
Telephone: (617) 565-7164

Region II
(NJ, NY, * PR,* VI*)
201 Varick Street
Room 670
New York, 10014
Telephone: (212) 337-2378

Region III
(DC, DE, MD,* PA, VA,* WV)
Gateway Building, Suite 2100
3535 AM Street
Philadelphia, PA 19104
Telephone: (215) 596-1201

Region IV
(AL, FL, GA, KY,*MS, NC,
SC,* TN*)
1375 Peachtree Street, N.E.
Suite 587
Atlanta, GA 30367
Telephone: (404) 347-3573

Region V
(IL, IN,* MI,* OH, WI)
230 South Dearborn Street
Room 3244
Chicago, IL 60604
Telephone: (312) 353-2220

Region VI
(AR, ILA, NM,*OK, TX)
525 Griffin Street
Room 602
Dallas, TX 75202
Telephone: (214) 767-4731

Region VII
(IA,* KS, MO, NE)
City Center Square
110 Main Street, Suite 800
Kansas City, MO 64105
Telephone: (816)426-5861

Region VIII
(CO, MT, ND, SD, UT,* WY*)
Federal Building, Room 1576
1999 Broadway
Denver, CO 8002-5716
Telephone: (303) 391-5858

Region IX
American Samoa, AZ,* CA,*
Guam, HI,*NV,*Trust Territories of the Pacific)
71 Stevenson Street, Room 420
San Francisco, CA 94105
Atlanta, GA 30367
Telephone: (415) 744-6670

Region X
(AK, * ID, OR,* WA*)
1111 Third Avenue
Suite 715
Seattle, WA 98101-3212
Telephone: (206) 553-5930

* These states and territories operate their own OSHA-approved job safety and health programs (Connecticut and New York plans cover public employees only). States with approved programs must have a standard that is identical to, or at least as effective, as the federal standard.