How To Use This Manual

What are toolbox talks?

As an employer your are required to instruct your employees in the recognition and avoidance of unsafe conditions at their jobsite and the regulations that apply to their work environment. Your employees must be able to control or eliminate any hazards, or other exposure to illness or injury.

Toolbox talks are brief employee safety training sessions designed to help you with the above OSHA requirement. Toolbox talks should be conducted regularly (usually weekly) by your jobsite foreman or superintendent. This is a simple, yet effective means of providing:

- Required OSHA safety instruction.
- Specific jobsite hazard training.
- General jobsite safety awareness.

Toolbox talk sessions are a perfect time to discuss specific jobsite hazards or a general topic.

This manual provides you with a wide range of construction safety topics. These topics were determined by research to be of interest to construction employers. They provide a simple, yet effective means of conducting your toolbox talks.

Layout of this manual

This manual is divided into four major tabbed sections. They are:

- How To Use This Manual.
- How To Conduct A Toolbox Talk.
- Toolbox Talk Topics.
- Subject Index.

The topics section is further tabbed, by major topics, to help you find a specific topic.

How To Use This Manual

This section (the one you are currently reading) provides a brief overview of toolbox talks, the contents of this manual, and detailed information on the manual's layout and what type of information each section contains.

How To Conduct A Toolbox Talk

This section of the manual provides a brief overview on how to prepare for, and conduct a toolbox talk. The section provides a step-by-step checklist of what you can do to accomplish this task. With the help of the provided information, and reproducible handout sheets, almost anyone can conduct a toolbox talk.

In the How to Conduct a Toolbox Talk tab, we provide an Individual Training Log to be used to track each employee's training. Feel free to copy this log. J.J. Keller & Associates, Inc., grants permission to reproduce the Individual Training Log included in this publication provided that Keller's copyright notice and imprint remain visible on all copies. The copies you make may not be resold or incorporated in any other publication.

Toolbox Talk Topics

This section presents the toolbox talk topics. See the Toolbox Talk Topics list at the front of this section for a complete listing of the topics. This section is further broken down by tabs into major topic areas.

Each topic uses the same format, with four total pages covering each topic. See the next heading in this section, Layout of each topic section, for a more detailed description of the layout for each topic.

Layout of each topic section

Each Toolbox Talks topic is four pages of standardized information, broken out in the following way:

Topic Pages

These pages are intended for the supervisor, foreman, or other safety trainer. The pages cover three particular categories for the user:

- Overview of the topic (a summary of what the topic is).
- Employee training (a summary of training requirements and/or suggestions).
- Training tips (including a standard subsection entitled Where To Go For More Information).

Topic Handout Page

The handout page for each topic can be copied and handed out to your employees participating in the toolbox talk. The handout page is reproducible for your internal use. J.J. Keller & Associates, Inc., grants permission to reproduce the handouts in this publication provided that Keller's copyright notice and imprint remain visible on all copies. The copies you make may not be resold or incorporated in any other publication. You may want to block out the footer and date at the bottom of the page for a cleaner copy.

Topic Sign-Off Sheet

The sign-off sheet for each topic is for documenting employee training on that particular topic with that particular handout. This sheet may be copied to provide you with enough lines for all employees participating in training to sign it. J.J. Keller & Associates, Inc., grants permission to reproduce the sign-off sheets in this publication provided that Keller's copyright notice and imprint remain visible on all copies. The copies you make may not be resold or incorporated in any other publication.

The following four pages are prototypes of actual pages. These pages will give you an idea of how the pages are laid out and what type of information each section contains.

	Торіс
Overview Of Topic	This section describes the topic, including whether or not it is a regulated topic, and what and how it is regulated. Here you should speci cally identify any training requirements the regulation speci es, and note that information on them will be covered in more detail in the Employee Training section.
Employee Training	This training requirements section lays out what must be trained on according to the regulation, what is nice-to-know or related information on the topic, and what is a suggested agenda for covering this topic.
Training Tips	This section gives practical suggestions for conducting the toolbox talk, including references to the information conveyed on the employee handout, any materials or props you might want to use in training, exercises or training techniques to use, and any PPE required.
	Where To Go For More Information
	You could use this preset subhead under Training Tips if you know of a particularly good resource.

KELLER'S	KELLER'S CONSTRUCTION TOOLBOX TALKS	
	Topic	
	TOPIC-2	

This sheet is the employee handout, with summary information on the topic written to the employ A graphic image will always be included on this sheet to illustrate the topic in some way.		Topic Handout Title
	This sheet is the employee handout, wit A graphic image will always be included	h summary information on the topic written to the employed on this sheet to illustrate the topic in some way.
TOPIC HANDOUT-1		

	Topic Sign-Off Sheet
This sheet is your documentation and summary of what was covered, as well have been trained on the topic.	record of your toolbox talk sessions. It provides a brief as the space below for employees to sign off that they
Date of Training:	. T.D. T
Employee Signature	Job Location: Print Name Here

Update and Refresher Training

Certain OSHA standards require periodic or refresher training or retraining based upon observed employee behavior. To keep workers and jobsites safe, some standards call for periodic update or refresher training. Other standards require retraining based upon specific circumstances, such as observed behavior.

Annual retraining/employee information requirements

The following OSHA construction standards include annual retraining/employee information requirements:

- Subpart D Hazardous waste operations and emergency response 1926.65(e)(8), Refresher training
- Subpart D Hazardous waste operations and emergency response 1926.65(p)(7), Refresher training
- Subpart D Hazardous waste operations and emergency response 1926.65(q)(8), Refresher training
- Subpart E Personal Protective and Life Saving Equipment 1926.103 (same as 1910.134(k)(5), Training and Information)
- Subpart L Scaffolding 1926.454(c), Training Requirements
- Subpart M Fall Protection 1926.503, Training requirements
- Subpart X Stairways and Ladders 1926.1060(b), Training Requirements
- Subpart O Motor Vehicles, Mechanized Equipment, and Marine Operations 1926.602(d), Powered industrial truck operator training (same as 1910.178(l), Operator training))

In addition, the chemical-specific regulations in 29 CFR Part 1910 Subpart Z require annual retraining.

Training Requirements at a Glance

OSHA Construction Training Requirements (29 CFR Parts 1904 and 1926)

Category: Injury and Illness Recordkeeping — Employee Involvement (1904.35)

Who: Employers must inform each employee of how to report an injury or illness.

When: When initially hired.

Recordkeeping: No specific training documentation is required.

Category: General Safety and Health Provisions (1926.20)

Who: Employers may permit only those employees qualified by training or experi-

ence to operate equipment and machinery.

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Safety Training and Education (1926.21)

Who: Contractors must instruct each employee about the applicable regulations

and to recognize and avoid unsafe conditions to control or eliminate any haz-

ards or other exposure to illness or injury.

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Access to Employee Exposure and Medical Records (1926.33)

Who: All employees.

When: At the time of hire and at least annually thereafter.

Recordkeeping: No specific training documentation is required. But, the employer is required

to make copies of 1910.1020 and its appendices readily available.

Category: Employee Emergency Action Plans (1926.35)

Who: Employee are to be instructed in their responsibilities under the emergency

action plan.

When: Before implementing the plan, a sufficient number of persons must be

trained to assist in the evacuation procedures. The employer is to review the plan with each employee initially when the plan is developed, upon the employee's initial assignment, when the employee's responsibilities under

the plan change, and whenever the plan is changed.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Medical Services and First Aid (1926.50)

Who: A person who has a valid certificate in first aid training from the U.S. Bureau

of Mines, the American Red Cross, or equivalent training is to be available at the worksite to render first aid in the absence of an infirmary, clinic, hospital,

or physician that is reasonably accessible.

When: No training time is specified.

Category: Ionizing Radiation (1926.53)

Who: A competent person or persons specially trained in the proper and safe oper-

ation of equipment involving the use of radioactive materials must operate the equipment. When the activity is performed under license from the Atomic Energy Commission, only persons actually licensed are to perform or

supervise the work.

When: At least annually, the employer is to advise each employee of his or her indi-

vidual exposure monitoring results. Following a reportable exposure incident, the exposed employee is to receive written notification of his or her exposure.

Recordkeeping: The employer is to post a copy of the standard along with copies of operating

procedures or is to keep these available for employee examination upon request. Also, there are requirements for maintaining exposure records from

personnel monitoring.

Category: Nonionizing Radiation (1926.54)

Who: Only qualified and trained employees can be assigned to install, adjust, and

operate laser equipment.

When: No training time is specified.

Recordkeeping: The laser equipment operator must carry proof of his or her qualification.

Category: Gases, Vapors, Fumes, Dusts, and Mists (1926.55)

Who: When employees use respirators, the employer must meet the requirements

(including training requirements) of the Respiratory Protection standard

(1926.103).

When: Training must precede the use of a respirator. Retraining on respirator use is

required to be conducted annually, and whenever necessary to ensure safe use.

Recordkeeping: No specific respirator training documentation is required. The employer is

required to maintain records of employee medical evaluations and respirator

fit testing results.

Category: Ventilation (1926.57)

Who: All employees working in and around open-surface tank operations must be

instructed on the job's hazards and the personal protection and first aid procedures applicable to these hazards. A trained stand-by employee with a suitable respirator must be present when it is necessary to enter a tank which

may contain a hazardous atmosphere.

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Hazard Communication (1926.59)

Who: Train all workers who have an exposure or a potential for exposure to haz-

ardous chemicals.

When: Employees must be trained prior to initial exposure and when a new chemi-

cal hazard is introduced. No specified length of training time.

Recordkeeping: No specific training documentation is required.

Category: Methylenedianiline (1926.60)

> Employees who may be exposed to airborne 4,4'-Methylenedianiline (MDA) Who: at or above its action level or where dermal exposure to MDA can occur. (Note: the standard does not apply to finished articles that contain MDA or to materials in any form that contain less than 0.1% MDA by weight or volume.) Also, this standard incorporates by reference 1910.38, 1910.1200, and 1910.134, which have additional training requirements. Also, any person who cleans or launders contaminated protective clothing is to be informed of the hazards of exposure to MDA. In addition, the employer must provide specified information to the physician who is conducting medical surveil-

lance, and the employee is to receive a copy of the physician's written opinion

within fifteen days after the employer receives it.

At the time of initial assignment and at least annually thereafter. Also, with-When: in fifteen working days after receiving monitoring results, the employer is to notify each employee of his or her exposure level either individually in writing or by posting the results. Also, each time that an employee undergoes a medical exam by an employer-selected physician, the employer must prompt-

ly notify the employee that he or she has the right to seek a second medical

Training records are to be maintained for one year beyond the last date of Recordkeeping:

> employment. The employer must make written training materials, including a copy of the standard, readily available to affected employees. There are additional recordkeeping requirements for exposure monitoring and medical

surveillance programs.

Category: Lead Exposure in Construction (1926.62)

Who: All employees subject to lead exposure in the construction industry.

Initial training shall occur before an employee starts an affected job assign-When:

ment and at least annually for employees exposed above the action level.

Recordkeeping: The employer needs to document materials relating to this training program.

Process Safety Management of Highly Hazardous Chemicals Category:

(1926.64)

Who: Employees who operate a process. Contract employers must inform contract

employees of known potential fire, explosion, or toxic release hazards related

to the contractor's work and process.

Initial training and refresher training every three years or more often if nec-When:

essary.

Recordkeeping: Training requires written operating procedures. Employers must record

employee identity, date of training, and means used to verify that the

employee understood the training.

Category: Hazardous Waste Operations and Emergency Response — HAZWOPER (1926.65)

Who:

- 1. Employees who work at a hazardous waste site and those who are managers or supervisors at a hazardous waste site require training under the standard's paragraph (e).
- 2. Employees who work at a Treatment, Storage, and Disposal (TSD) facility require training under the standard's paragraph (p).
- 3. Any employees designated to participate in emergency response to hazardous substance releases require training under the standard's paragraph (q).

When:

OSHA specifies training time requirements for all of the various duties involved.

- 1. Employees working at a hazardous waste site must be trained before they participate in field activities and annually thereafter (paragraph (e)).
- 2. Employees working at a TSD facility must be trained upon initial assignment and annually thereafter (paragraph (p)).
- 3. Any employees designated to participate in emergency response to hazardous substance releases must be trained prior to taking part in actual emergency operations, and must receive annual refresher training (paragraph (q)).

Recordkeeping:

Training certification is required under paragraph (e), general training; paragraph (p), certain operations conducted under RCRA; and paragraph (q), emergency response to hazardous substance releases.

Category: Hearing Protection (1926.101)

Who: Ear protective devices inserted in the ear are to be fitted or determined indi-

vidually by competent persons.

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Respiratory Protection (1926.103)

Who: All workers who use or have the potential to use a respirator, must be trained

in the proper use and the limitations of respirators.

When: Training must precede the use of a respirator. Retraining is required to be

conducted annually and whenever necessary to ensure safe use.

Recordkeeping: No specific training documentation is required. The employer is required to

maintain records of employee medical evaluations and fit testing results.

Category: Fire Protection (1926.150)

Who: The employer is to provide a trained and equipped firefighting organization

(fire brigade) as warranted by the project. During demolition or alterations, existing automatic sprinkler installation control valves may only be operated by properly authorized persons. The alarm code and reporting instructions

are to be conspicuously posted at phones and employee entrances.

When: No training time is specified.

Category: Signaling (1926.201)

Who: Flagmen are to use signaling directions that conform to American National

Standards Institute D6.1-1971, Manual on Uniform Traffic Control Devices

for Streets and Highways.

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Power-operated Hand Tools (1926.302)

Who: Employees operating powder-actuated hand tools.

When: Training is required before operation of tool.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Welding and Cutting, Gas and Arc (1926.350-351)

Who: Employers of gas and arc welders must instruct them in the safe use of fuel

gas and the safe means of arc welding and cutting.

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Fire Prevention (1926.352)

Who: Employees assigned to guard against fire during welding, cutting, or heating

operations (and for a sufficient period of time after completion of the work) are to be instructed on the specific anticipated fire hazards and how the pro-

vided firefighting equipment is to be used.

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Welding, Cutting, and Heating in way of Preservative Coatings

(1926.354)

Who: A competent person is to test a surface covered by a preservative coating for

flammability before welding, cutting, or heating is started (when the flamma-

bility of the preservative coating is not known).

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Wiring Design and Protection (1926.404)

Who: The employer must designate one or more competent persons to implement the

assured equipment grounding conductor program (when a program is used).

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified. Records must be kept

of the tests performed as required by the assured equipment grounding con-

ductor program.

Category: Scaffolding (1926.454)

Who: Competent person(s) (i.e., trained) must supervise the erection, moving, dis-

mantling, or alteration of scaffolds.

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Training Requirements (Fall Protection) (1926.503)

Who: Each employee who might be exposed to fall hazards is to be trained to recog-

nize the hazards of falling and must be trained in the procedures to be followed in order to minimize these hazards. Training is to be conducted by a

competent person who is qualified in the areas outlined in the standard.

When: Initial training and retraining when the employer has reason to believe that any affected employee does not have the required understanding and skill.

Recordkeeping: The employer is to prepare a written certification record that contains the

name or other identity of the employee trained, the date(s) of the training, and the signature of the person who conducted the training or the signature

of the employer. The latest training certification is to be maintained.

Category: Cranes and Derricks (1926.550)

Who: Competent person(s) must inspect all machinery and equipment prior to each

use, and during use, to make sure it is in safe operating condition. Rated load capacities, and recommended operating speeds, special hazard warnings, or instructions are to be conspicuously posted on all equipment, and instructions or warnings are to be visible to the operator while he is at his control station. An illustration of hand signals is to be posted at the job site. A designated person is to observe clearance and give timely warning for all operations where it is difficult for the operator to see the clearance. For floating cranes and derricks, a clearly legible load rating chart is to be secured where it is easily visible to the operator. When employees are to be lifted using suspended personnel platforms, a pre-lift meeting is to be held to review the pro-

cedures to be followed.

When: When employees are to be lifted using suspended personnel platforms, the

pre-lift meeting is to be held at each new work location and is to be repeated

for any newly assigned employees. No other training time is specified.

Category: Material Handling Equipment (1926.602)

Who: Anyone operating a powered industrial truck must be trained and evaluated. When: Training and evaluation must occur before the worker operates the vehicle

when: Training and evaluation must occur before the worker operates the vehicle without direct supervision. Refresher training in relevant topics is needed when the vehicle is experted in an unsafe manner after any assident or near

when the vehicle is operated in an unsafe manner, after any accident or nearmiss, after an evaluation shows retraining is needed, upon assignment to a different type of truck, and upon changes in the workplace that affect safe

truck operation. An evaluation is required at least every three years.

Recordkeeping: The employer must certify that the operator has been trained and evaluated.

The certification must include the operator's name, the dates of the training

and evaluation, and the name of the trainer/evaluator.

Category: Site Clearing (1926.604)

Who: Employees engaged in site clearing are to be instructed in the first aid treat-

ment available.

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Steel Erection — Training (1926.761)

Who: Steel erection employees exposed to fall hazards and those engaged in multi-

ple lift rigging, connector, and Controlled Decking Zone procedures.

When: No training time is specified.

Who:

Recordkeeping: No training recordkeeping requirements are specified.

Category: Underground Construction (1926.800)

All employees are to be instructed in the recognition and avoidance of hazards associated with underground construction activities. Oncoming shifts are to be informed of any hazardous occurrences or conditions that have or may affect employee safety. At least one designated person is to be on duty above ground to summon aid and keep an accurate count of employees underground. Qualified rescue teams are to be available. A competent person is to inspect the roof, face, and walls of the work area at the start of each shift and as often as necessary to determine ground stability. After blasting in shafts, a competent person is to determine if walls, ladders, timbers, etc. have loosened. A competent person is to inspect all drilling equipment before each use. Employees working below jumbo decks are to be warned whenever drilling is about to begin. A competent person is to inspect haulage equipment before each shift. Employees are to be given suitable instructions before maintenance, repairs,

or other work is started in the shaft served by a cage, skip, or bucket.

When: No training time is specified.

Category: Compressed Air (1926.803)

Who: Every employee is to be instructed in the rules and regulations which con-

cern his safety or the safety of others. At least one employer-designated competent person is to be present at all times. When a medical lock is required, it is to be under the charge of an attendant who is trained in the use of the lock and has been instructed regarding steps to be taken in the treatment of

decompression illness.

Every employee going under air pressure for the first time is to be instructed When:

on how to avoid excessive discomfort.

No training recordkeeping requirements are specified. Recordkeeping:

Category: Blaster Qualifications (1926.901)

> Who: Blasters (persons authorized to use explosives for blasting purposes) must

meet the standard's qualifications requirements.

When: No training time is specified.

No training recordkeeping requirements are specified. Recordkeeping:

Category: Surface Transportation of Explosives (1926.902)

Who: Drivers of vehicles transporting explosives are to be licensed and familiar

with local, state, and federal regulations governing the transportation of explosives. The driver must be trained to use the vehicle's fire extinguisher.

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified.

Category: **Firing the Blast (1926.909)**

> Who: All employees are to familiarize themselves with (and conform to) the posted

code of blasting signals.

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified.

Category: General Requirements (Power Transmission) (1926.950)

Who: Employees are to be trained and proficient in emergency procedures and first

aid.

When: No training time is specified.

Recordkeeping: No training recordkeeping requirements are specified.

Category:Overhead Lines (1926.955)

Supervisors of live-line bare-hand work are to be trained and qualified.

Employees using the live-line bare-hand technique on energized circuits are

to be trained.

When: Prior to stringing or removing deenergized conductors, an operations briefing

is to be held. Before using the live-line bare-hand technique on energized circuits, employees are to be trained in the technique and safety requirements.

Category: Training Requirements (Stairways and Ladders) (1926.1060)

Who: Each employee using stairways and ladders is to be trained to recognize haz-

ards and follow procedures to minimize the hazards.

When: Retraining is to be provided as necessary.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Qualifications of Dive Team (1926.1076)

Who: All employees who work as commercial dive team members.

When: Employees must be trained prior to conducting any tasks on the dive team.

There is no specified length of training time.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Asbestos (1926.1101)

Who: Persons who supervise hazard control operations related to asbestos, tremo-

lite, anthophyllite, and actinolite must be trained in engineering controls and in abatement, the contents of this standard, and identification and removal

procedures.

When: Training is provided before initial assignment and at least annually thereafter.

Recordkeeping: The employer must have all written materials relating to the employee train-

ing program including this regulation, available to all affected employees. Training records must be maintained for one year beyond an employee's last

day of employment.

Category: 13 Carcinogens (4-Nitrobiphenyl, etc.) (1926.1103)

Who: Authorized employees (those employees assigned to work where a regulated

carcinogen is manufactured, processed, used, repackaged, released, handled, or stored). This standard incorporates by reference 1910.134, which has addi-

tional training requirements for employees who wear respirators.

.When: Prior to being authorized to enter a regulated area and annually thereafter.

Recordkeeping: No training recordkeeping requirements are specified.

Category: Vinyl Chloride (1926.1117)

Who: Any employee engaged in vinyl chloride or polyvinyl chloride operations

(including manufacture, reaction, packaging, repackaging, storage, handling, or use). (Note: does not apply to employees who handle or use fabricated products made of polyvinyl chloride.) This standard incorporates by reference 1910.134, which has additional training requirements for employees who

wear respirators.

When: Prior to or at the time of initial assignment and annually thereafter.

Category: Inorganic

Inorganic Arsenic (1926.1118)

Who:

Training is to be provided to employees who are subject to exposure to inorganic arsenic above the action level (without regard to respirator use), or for whom there is a possibility of skin or eye irritation from inorganic arsenic. (Does not apply to employees exposed in agriculture or to employees exposed from pesticide application, treating wood with preservatives or using arsenically preserved wood.) Also, any person who cleans or launders contaminated protective clothing is to be informed in writing of the hazards of exposure to inorganic arsenic. In addition, the employer must provide specified information to the physician who is conducting medical surveillance, and the employee is to receive a copy of the physician's written opinion.

When:

Training to be provided at the time of initial assignment, and shall be repeated at least annually. Each employee is to be notified in writing of air monitoring results that are representative of his or her exposure within five working days after the receipt of the monitoring results.

Recordkeeping:

The employer shall provide, upon request, all materials relating to the employee information and training program to the Assistant Secretary and the Director. The employer shall make readily available to all affected employees a copy of 1910.1018 and its appendices. There are additional recordkeeping requirements for exposure monitoring and medical surveillance programs.

Category:

Cadmium (1926.1127)

Who:

All employees who are potentially exposed to cadmium. This standard incorporates by reference 1910.134 and 1926.59, which have additional training requirements. Also, any person who cleans or launders contaminated protective clothing is to be informed of the hazards of exposure to cadmium. In addition, the employer must provide specified information to the physician who is conducting medical surveillance. Within fifteen days after a request by the employee or other specified persons, the employer is to make the employee's medical surveillance records available for examination or copying. Prior to or at the time of initial assignment and at least annually thereafter.

When

Prior to or at the time of initial assignment and at least annually thereafter. No later than five working days after receiving monitoring results, the employer is to notify each employee of his or her exposure level in writing, and must post the results. Also, each time that an employee undergoes a medical exam by an employer-selected physician, the employer must promptly notify the employee that he or she has the right to seek a second medical opinion.

Recordkeeping:

The employer is to prepare a certification record of training that includes the employee's name, signature of the employer or the trainer, and date of training. This record is to be maintained for one year beyond the training date. The employer is to maintain a record of the contents of the training program and shall provide, upon request, all materials relating to the program to the Assistant Secretary and the Director. There are additional recordkeeping requirements for exposure monitoring and medical surveillance programs.

Category: Benzene (1926.1128)

Who: Training must be provided to all employees who are exposed to airborne con-

centrations of benzene at or above the action level.

When: Training shall be provided prior to or at the time of initial assignment and at

least annually thereafter.

Recordkeeping: No specific training documentation is required.

Category: Coke Oven Emissions (1926.1129)

Who: Employees who are assigned to work in a regulated area. Employees who

refuse to participate in the medical surveillance program are to be informed of the possible health consequences. In addition, the employer must provide specified information to the physician who is conducting medical surveillance, and the employee is to receive a copy of the physician's written opinion. Also, this standard incorporates by reference 1910.134, which has

additional training requirements for employees who wear respirators.

When: At the time of initial assignment and annually thereafter. Also, within five

working days after receipt, the employer is to notify the employee in writing

of exposure monitoring results.

Recordkeeping: Employees who refuse to participate in the medical surveillance program are

to sign a statement that they understand the risks involved with refusing the examination. Appropriate procedures and schedules are to be posted in the regulated area. The employer is to maintain a record of the contents of the training program and shall provide, upon request, all materials relating to the program to the Secretary and the Director. The employer shall make readily available to all affected employees a copy of 1910.1029 and its appendices. There are additional recordkeeping requirements for exposure moni-

toring and medical surveillance programs.

Category: 1,2-dibromo-3-chloropropane (1926.1144)

Who: Applies to employees who are occupationally exposed to 1,2-dibromo-3-chloropropane (DBCP). Employees must meet training requirements when they

work in operations where DBCP is stored, transported, distributed or sold in intact containers that are sealed to prevent exposures to DBCP vapors or liquid, but they may be exempt from some of the other requirements of the standard. This standard does not apply to employees who are exposed solely from the application and use of DBCP as a pesticide. Also, this standard incorporates by reference 1910.134, which has additional training requirements for employees who wear respirators. Also, any person who cleans or launders contaminated protective clothing is to be informed of the hazards of exposure to DBCP. In addition, the employer must provide specified information to the physician who is conducting medical surveillance, and the employee is to

receive a copy of the physician's written opinion.

When: Annually, the employer is required to inform the employees of the information contained in the standard's Appendix A. Also, within five working days after receiving monitoring results, the employer is to notify each employee of

his or her exposure level in writing.

Recordkeeping:

The employer is to maintain a record of the contents of the training program and shall provide, upon request, all materials relating to the program to the Assistant Secretary and the Director. The employer shall make readily available to all affected employees a copy of 1910.1044 and its appendices. There are additional recordkeeping requirements for exposure monitoring and medical surveillance programs.

Category:

Acrylonitrile (1926.1145)

Who:

Employees occupationally exposed to acrylonitrile (AN). The standard does not apply to processing, use, and handling of finished polymers (and products made from polymers) of ABS resins, SAN resins, nitrile barrier resins, solid nitrile elastomers, acrylic and modacrylic fibers, and solids made from or containing AN that will not be heated above 170 degrees F. (Also exempt are other AN materials that are not capable of releasing specified amounts of airborne AN.) Also, this standard incorporates by reference 1910.132 and 1910.134, which have additional training requirements for employees who wear personal protective equipment or respirators. Also, any person who cleans or launders contaminated protective clothing is to be informed of the hazards of exposure to AN. In addition, the employer must provide specified information to the physician who is conducting medical surveillance, and the employee is to receive a copy of the physician's written opinion.

When:

At the time of initial assignment and at least annually thereafter. Also, within five working days after receiving monitoring results, the employer is to notify each employee of his or her exposure level in writing.

Recordkeeping:

The employer is to maintain a record of the contents of the training program and shall provide, upon request, all materials relating to the program to the Assistant Secretary and the Director. The employer shall make readily available to all affected employees a copy of 1910.1045 and its appendices. A training certificate is required for employees trained in using personal protective equipment under 1910.132. There are additional recordkeeping requirements for exposure monitoring and medical surveillance programs.

Category:

Ethylene Oxide (1926.1147)

Who:

Employees who have the potential to be exposed to ethylene oxide (EtO) at or above the action level, or above the excursion limit. Also, this standard incorporates by reference 1910.38, 1910.132, and 1910.134, which have additional training requirements. In addition, the employer must provide specified information to the physician who is conducting medical surveillance, and the employee is to receive a copy of the physician's written opinion within fifteen days after the employer receives it.

When:

At the time of initial assignment and at least annually thereafter. Also, within fifteen working days after receiving monitoring results, the employer is to notify each employee of his or her exposure level either individually in writing or by posting the results.

Recordkeeping:

The employer shall make a copy of 1910.1047 and its appendices available to employees. A training certificate is required for employees trained in using

personal protective equipment under 1910.132. There are additional record-keeping requirements for exposure monitoring and medical surveillance programs.

Category: Formaldehyde (1926.1148)

Who:

When:

Employees assigned to workplaces where there is exposure to formaldehyde at or above 0.1 ppm. Also, this standard incorporates by reference 1910.132 and 1910.134, which have additional training requirements for employees who wear personal protective equipment or respirators. Also, any person who cleans or launders contaminated protective clothing is to be informed of the hazards of exposure to formaldehyde. In addition, the employer must provide specified information to the physician who is conducting medical surveillance, and the employee is to receive a copy of the physician's written opinion within fifteen days after the employer receives it.

At the time of initial assignment and whenever a new exposure to formalde-

hyde is introduced.

Training is to be repeated at least annually. Also, within fifteen working days after receiving monitoring results, the employer is to notify each employee of his or her exposure level either individually in writing or by posting the results. Also, each time that an employee undergoes a medical exam by an employer-selected physician, the employer must promptly notify the employ-

ee that he or she has the right to seek a second medical opinion.

Recordkeeping: The employer is to maintain a record of the contents of the training program

and shall provide, upon request, all materials relating to the program to employees and to the Assistant Secretary and the Director. A training certificate is required for employees trained in using personal protective equipment under 1910.132. There are additional recordkeeping requirements for respirator fit testing, exposure monitoring, and medical surveillance programs.

Category: Methylene Chloride (MC) (1926.1152)

Who: All employees potentially exposed to methylene chloride.

When: Training is provided prior to or when initially assigned to a job. Retraining is

given on an as-needed basis.