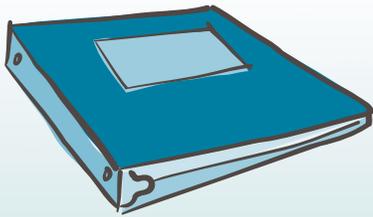


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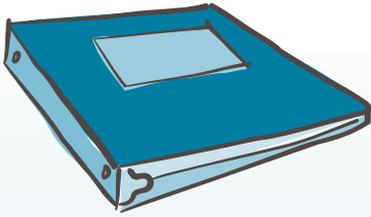
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Introduction

About OR-OSHA's training requirements

OR-OSHA has general training requirements intended to make workers aware of the overall safety and health aspects of their jobs and specific training requirements that apply to workers who perform special jobs or tasks.

OR-OSHA's safety and health requirements frequently use the words *certified*, *designated*, *authorized*, *competent person*, and *qualified person* to identify workers who must meet specific training requirements.

Certified indicates that a worker has successfully completed specialized training and that the training has been certified in writing by a professional organization. For example, OR-OSHA's safety and health rules allow only trained audiologists, otolaryngologists, or technicians who have been certified by the Council of Accreditation in Occupational Hearing Conservation to perform audiometric tests.

Designated generally refers to a person who has received extensive training in a particular task and is assigned by the employer to perform the task.

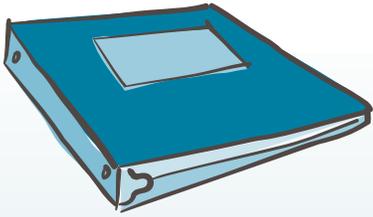
Authorized refers to a person permitted by an employer to be in a regulated area; the term also refers to a person assigned by an employer to perform a specific task or to be in a specific location at a jobsite.

A **competent person** is someone who has broad knowledge of worksite safety and health issues, who is capable of identifying existing and predictable worksite hazards, and who has management approval to control the hazards. Only a competent person can supervise erecting, moving, or dismantling scaffolds at a worksite, for example.

A **qualified person** is someone who, through training and professional experience, has demonstrated the ability to resolve problems relating to a specific task or process. For example, an individual may be qualified to perform electrical circuit tests but not qualified to perform hydraulic pressure tests.

What workplace training can and can't do for workers

Worker training is an essential element of every employer's safety and health program. The time and money it takes to train workers is an investment that pays off in fewer workplace accidents and lower insurance premiums. Training also helps inexperienced workers, who tend to have higher injury and illness rates than experienced workers. However, training isn't likely to help if workers don't understand it, if they are unmotivated, or if managers and supervisors don't enforce safe work practices.



Keep in mind:

*A **competent person** is a person who, because of training and experience, can identify existing and predictable hazards in equipment, material, conditions or practices and who has the knowledge and authority to take corrective steps.*

*An **authorized person** is one to whom the authority and responsibility to perform a specific assignment have been given by the employer.*

*An **affected person** is one who operates or uses equipment on which servicing or maintenance is being performed under lockout or tagout or who works in an area in which servicing or maintenance is being performed. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance.*

Keep in mind:

*An employer or trainer who issues an EPA-approved **Worker Protection Standard training certificate** must ensure that the worker who receives the certificate has been trained in accordance with Division 4/W, 170.130(d) (4) requirements.*

Agricultural operations and farming

***Inspection requirement.** A competent person must inspect every place of employment at least quarterly.*

***Hazard communication.** Workers must receive information and training on hazardous chemicals in their work areas before they begin their jobs and before they are exposed to new hazards. Chemical-specific information must be described on labels and in material safety data sheets. Workers who mix, load, apply, or handle hazardous chemicals must receive hazard communication information and training.*

***Hazardous energy control.** Authorized persons must be able to recognize hazardous energy sources and types of energy in their workplaces and know how to control and isolate the energy. Affected employees must know about the purpose of the energy control program. Other employees who may be exposed to hazardous energy must be instructed about energy-control procedures and about the prohibition to restart or energize locked-out or tagged-out equipment.*

***Medical services and first aid.** If local emergency medical responders can't handle onsite injuries or illnesses at your work site, your emergency medical plan must indicate the names, locations, and phone numbers of trained persons who can provide first aid. You must also ensure your employees understand the plan and their responsibilities under the plan.*

***Pesticide handling and application (Worker Protection Standard).** Workers and handlers must receive and understand pesticide safety training. Trainers must meet at least one of the following criteria:*

- Be currently certified as an applicator of restricted-use pesticides
- Be designated as a trainer of certified applicators or pesticide handlers
- Have completed a pesticide safety train-the-trainer program
- Satisfy the training requirements in the Worker Protection Standard

Pesticides may be on or in plants, soil, irrigation water, or drifting from nearby applications. Before workers enter a pesticide-treated area they must have training that covers the following:

- Heeding warnings about keeping out of treated or restricted areas.
- Washing before eating, drinking, using chewing gum or tobacco, or using the toilet.

Workers-in-training. Workers-in-training may operate a crane under the supervision of a person who has a current training card for that type of crane.

Out-of-state operators. Any person from another state wishing to operate a five-ton-or-greater-capacity crane can receive a training card from you or another training provider if they have 1,500 hours experience with that type of crane and training to operate the crane in Oregon. They may also operate such a crane after presenting a valid safety training card issued in a state with training requirements equal to those listed in 437-03-081, Division 3, Subdivision N, Appendices A-E.

Fire extinguishers. Operators and maintenance persons must know how to use on-board fire extinguishers.

Wind speed. Instruct the crane operator about the maximum permissible wind speed in which to operate a crane.

Crane hooks. Repairing crane hooks by welding or reshaping isn't recommended; however, if repairs are attempted, they must be done under the supervision of a competent person and the hook must be tested.

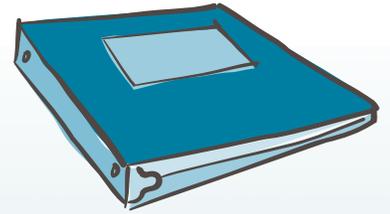
Lifting a load. When two or more cranes are used to lift a load a qualified person must instruct and supervise those involved in positioning, rigging, and moving the load.

Electrical

Workers exposed to electric shock hazards must be trained in safety requirements relevant to their jobs. Both *qualified* and *unqualified* persons must be trained.

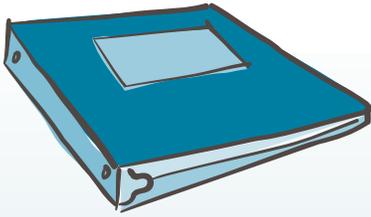
Excavations, trenching, and shoring

There are no specific excavation training requirements for workers; however, you must ensure that workers recognize and control or eliminate worksite hazards. In addition, a *competent person* must inspect an excavation daily for evidence of cave-in. A registered professional engineer must determine that excavations are a safe distance from existing structures and that they won't pose a hazard for workers. Support systems must be designed by *qualified persons* and inspected by a *competent person*.



Keep in mind:

Unqualified persons are workers who may be exposed to electric shock hazards during their jobs but who are not permitted to work on or near exposed energized equipment.



Fire protection and prevention

Employee alarm systems

Maintenance. Only trained persons must service, maintain, and test employee alarms.

Reporting emergencies. Employees must understand the preferred way to report emergencies – such as manual pull-box alarms, public address systems, radios, or telephones. When telephones are used to report emergencies, employers must post emergency telephone numbers near the telephones or on employee notice boards. A communication system that also serves as an employee alarm system must have priority over all non-emergency messages.

Fire brigades

Train all fire brigade members before they begin brigade activities. Leaders and training instructors must have more comprehensive training than other fire brigade members. Training must be conducted annually; however, fire brigade members who do interior structural fire fighting must be trained quarterly. The training must be similar to the programs offered by schools such as the Maryland Fire and Rescue Institute, Iowa Fire Service Extension, or Washington State's Fire Service Training Commission for Vocational Education.

If a construction project poses fire hazards, provide a trained and equipped fire brigade to ensure that workers are protected.

Inform fire brigade members about workplace hazards such as flammable liquids and gases, toxic chemicals, radioactive sources, and water-reactive substances. Develop written procedures describing how to deal with special hazards and make them available for inspection. These procedures must be included in training and education programs.

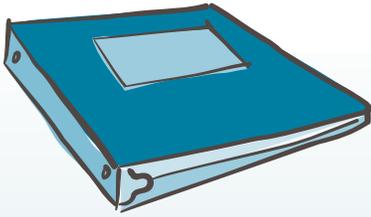
Fire detection systems

Maintenance. Be sure that fire detection systems are serviced, maintained, and tested by trained personnel.

Fire extinguishers, portable

Training and education. Employees designated to use fire-fighting equipment under your emergency action plan must also be trained how to use the equipment appropriately. If you provide portable fire extinguishers, you must train the employees annually how to use them and about the hazards involved in responding to fire emergencies.

Standpipe systems or hose stations. You can use uniformly spaced standpipe systems or hose stations connected to a sprinkler system instead of Class-A portable fire extinguishers



Standpipe and hose systems

Only trained personnel can inspect standpipe and hose systems.

Floors, wall openings, and stairways

Fall protection

Train workers exposed to fall hazards to recognize the hazards and to use procedures that will minimize them. The training must be done by a *competent person* who understands the following:

- The nature of fall hazards in the work area
- Procedures for erecting, maintaining, disassembling, and inspecting fall protection systems
- Use of guardrail systems, personal fall-arrest systems, safety net systems, warning line systems, safety monitoring systems, and controlled-access zones
- The role of each worker in the safety monitoring system
- Limitations of mechanical equipment during roofing work on low-sloped roofs
- Procedures for handling and storing equipment and for erecting overhead protection
- Workers' roles in fall protection plans
- The requirements of the fall protection rules

Certification. Certify each worker's training, documenting the worker's name, the training date, and the trainer's signature.

Retraining. Retrain any worker who does not have the skills required in the fall protection rule, 1926.503, Subdivision 3/M.

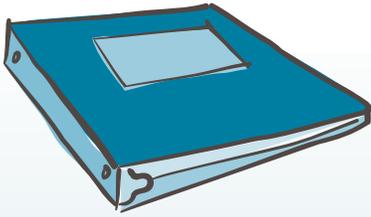
Forest activities

Provide job safety training and follow-up training for all workers. Before beginning new jobs, workers must be trained to safely operate the machinery, tools, or equipment that they will use.

Work conditions and first aid

Checking system. You must have a checking system that accounts for all workers at the end of each work shift. Workers must understand the system and must know how to use hazard identification ribbons.

First aid. In addition to supervisory personnel and cutters, twenty percent of workers must be first-aid trained within 90 days of their hire dates.



Horizontal lines for notes.

Keep in mind:

An authorized entrant means a worker who is authorized by the employer to enter a permit space.

Keep in mind for lockout/tagout:

Authorized employees do service and maintenance work; they must be trained to find and recognize hazardous energy sources, to know the types and magnitudes of energy, and to isolate energy sources.

Horizontal lines for notes.

General environmental controls

Accident prevention signs and tags

Caution signs. Use caution signs to warn workers and others about hazards or to prevent unsafe practices; workers must understand the signs.

Danger signs. Use danger signs to indicate immediate danger; workers must understand that these signs indicate immediate danger and that they must take special precautions.

Safety instruction signs. Use safety instruction signs to communicate general safety instructions.

Confined spaces, permit-required

Workers exposed to permit-required confined space hazards must have the understanding, knowledge, and skills necessary to perform their assigned duties. They must be trained before their duties are assigned and before any changes in their assigned duties.

Certification. Certify that workers accomplish their required training. Certification must include each worker’s name, trainers’ signatures or initials, and training dates. The certification must be available for inspection by workers and their authorized representatives.

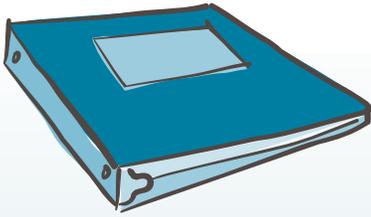
Rescue. Each member of a rescue team must be provided with and trained to use all equipment necessary for permit-space rescues. Each team member must be trained to perform assigned rescue duties must receive the training required for authorized entrants, and must be trained in basic first aid and in cardiopulmonary resuscitation (CPR). Attendants may enter a permit space to attempt a rescue if they have been trained and equipped for rescue work.

Lockout/tagout (hazardous energy control)

Establish energy-control procedures, training, and periodic inspections to ensure that workers can safely service machinery and equipment. Authorized employees must have training in using and removing energy controls. All others who work in areas where energy-control procedures are in effect must also know the procedures. When tag-out systems are used, workers must understand the limitations of tags.

Certification. Certify that workers are trained and that their training is current. Certification must include each worker’s name and training dates.

Removing locks or tags. Each lock or tag must be removed from its energy-isolating device by the worker who applied it. There is one exception: When the authorized employee who applied the lock or tag isn’t available to remove it, you can



until they have been trained at the level required by their jobs and responsibilities. Training must cover the following:

- Names of personnel and alternates responsible for worksite safety and health
- Hazards on the site
- Use of personal protective equipment
- Safe work practices
- Engineering controls and equipment used on-site
- Medical surveillance requirements
- Site safety and health plan requirements

General site workers such as equipment operators, general laborers, and supervisory personnel who do activities that expose them to hazardous substances must have at least 40 hours of instruction and three days of supervised field experience.

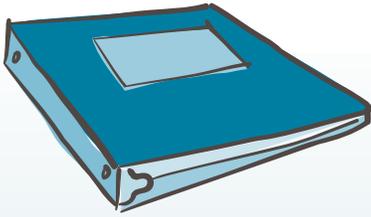
Workers who are on site only to accomplish a specific task and who are unlikely to be exposed over permissible exposure limits must have at least 24 hours of instruction and one day of supervised field experience.

Workers regularly on site must have at least 24 hours of instruction and one day of supervised field experience if they work in areas where exposures are under permissible limits, where respirators are not necessary, and where there are no health hazards or the possibility of an emergency.

Workers with 24 hours of training who become general site workers or who are required to wear respirators must have an additional 16 hours of instruction and two days of field training to equal the 40-hour training requirement for general site workers.

On-site managers and supervisors directly responsible for workers engaged in hazardous waste operations must have 40 hours of general training, three days of supervised field experience, and at least eight additional hours of specialized training. Training should cover your safety and health program, personal protective equipment, spill containment, and health-hazard monitoring procedures. Training may be reduced to 24 hours and one day for those who supervise workers who are on site occasionally or who work in areas where hazards don't exceed permissible exposure limits and where respirators are not required.

Trainers must have satisfactorily completed a training program for teaching required subjects, or they must have appropriate academic credentials and experience; they must be able to demonstrate instructional skills and knowledge in the required subjects.



involved. Those who work with hazardous substances and who might be called upon to give technical advice must receive annual training or demonstrate competency in their area of specialization.

First responders at the awareness level are those most likely to encounter a hazardous-substance release and who notify authorities of the release. First responders at the awareness level must have training or sufficient experience to demonstrate the following:

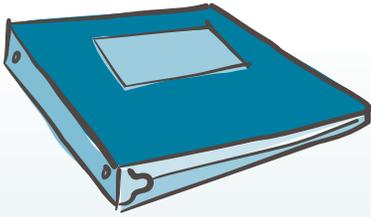
- An understanding of hazardous substances and the risks associated with them
- An understanding of potential outcomes of an emergency involving hazardous substances
- The ability to identify hazardous substances in an emergency
- An understanding of the first-responder awareness level role in the employer's emergency-response plan
- The ability to recognize when additional emergency resources are needed and to notify appropriate responders

First responders at the operations level respond to hazardous substance releases to protect people, property, or the environment. They are trained to respond defensively, without actually trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading, and prevent exposures. First responders at the operations level must have at least eight hours of training or sufficient experience to demonstrate the following:

- Knowledge of hazard- and risk-assessment techniques
- How to select and use personal protective equipment
- An understanding of hazardous-material terms
- How to do control, containment, and confinement work with available resources
- How to implement decontamination procedures
- An understanding of operation and termination procedures

Hazardous-materials technicians are trained to stop a hazardous substance release; they have a more aggressive role than first responders at the operations level. Hazardous-materials technicians must have at least 24 hours of training equal to the first-responder operations level, and they must know how to do the following:

- Implement the employer's emergency-response plan
- Use field survey instruments to classify, identify, and verify materials
- Work an assigned role in the Incident Command System



Trainers must complete teaching courses for their subjects or they must have equivalent academic credentials and instructional experience.

Annual refresher training is required. Workers who have received emergency-response-plan training must also have annual refresher training. The employer must issue a statement of competency for each worker and keep a record of the method used to demonstrate competency.

Train workers who do cleanup on plant property. Workers who do cleanup on plant property after an emergency must have training in the following areas:

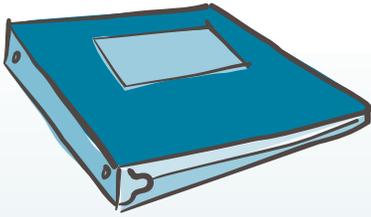
- Emergency plans and fire-prevention plans
- Respiratory protection
- Hazard communication
- Safety and health training relevant to the tasks they are expected to perform

Hazardous waste operations: treatment, storage, and disposal facilities

Train workers exposed to health hazards or hazardous substances at treatment, storage, and disposal facilities. New workers must have 24 hours of initial training and eight hours of annual refresher training. Workers who have successfully completed the initial training must receive a certificate attesting that they have done so. If you can show that a worker's experience and training is equivalent to the training requirements, you can waive initial training. All workers must have eight hours of annual refresher training.

Trainers must satisfactorily complete teaching courses in the subjects they teach or they must have equivalent academic credentials and experience.

Emergency responders must be trained before they respond to real emergencies. Training must include elements of the emergency-response plan, standard operating procedures, how to use personal protective equipment, and emergency procedures. There are two cases in which you need not train all workers for emergency-response activities: 1. Your workforce is divided so that a sufficient number of workers have the requisite training and all other workers can recognize an emergency and summon trained responders. 2. You have made arrangements in advance for an outside emergency team to respond and your workers can recognize an emergency and call the response team.



emergency-action plan; and understand their training. You must document the trainees' names, the training dates, and how you determined they understood the training.

Workers who maintain process equipment must be trained in equipment hazards and operating procedures. Maintenance and contract workers whose job tasks are affected by a process change must receive information and training about the changed process.

Reinforced plastics manufacturing

Train workers to safely handle materials. Training must include instruction in the following:

- Storage and handling
- Cleanup and disposal of spills
- First aid for spills
- Potential health and safety hazards
- Personal hygiene
- Personal protective measures and labeling

Eye protection. An eyewash fountain must be available no more than 25 feet or 15 seconds from any work area where methylethyl ketone peroxide is being mixed or transferred. The 15-second criterion applies if other workers are close enough under normal working conditions to offer assistance and if you have a formal training program that includes first-aid procedures for eye injuries.

Identification labels. Hazardous material identification labels must be on all hazardous-chemical containers. Labels are not required on small containers used and disposed of in one work shift. Keys explaining the labeling system must be prominently posted in the workplace. Workers must be trained to understand what the labels mean.

Health and environmental controls

Cadmium

Train all workers whose work involves potential exposure to cadmium. Annual training is required and it must cover the following:

- Health hazards associated with cadmium exposure
- Operations that could result in exposure to cadmium
- How workers can protect themselves from cadmium exposure
- The proper use of respirators and protective clothing
- The purpose of the medical surveillance program

Certify that workers have been trained and document each trainee's name, the trainer's signature, and the date the training was completed. Records must be maintained for one year.

You must also comply with the training requirements of OR-OSHA's hazard communication rules, below.

Hazard communication

Provide workers with training and information on hazardous chemicals in their work areas at the time of initial assignment and whenever you become aware of new hazards. Training and information must cover the following:

- Hazard communication requirements
- Operations where hazardous chemicals are present
- The location and availability of the written hazard-communication program
- Methods used to detect the presence or release of hazardous chemicals in the work area
- Hazards of chemicals in the work area
- How workers can protect themselves from chemical hazards, including spills or leaks from sealed containers

Ionizing radiation

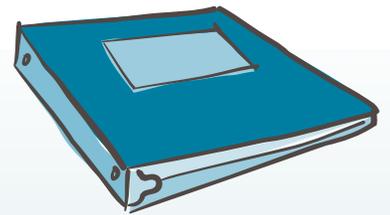
Work involving radioactive materials must be performed by a competent person. Work involving materials used under Nuclear Regulatory Commission (NRC) license can be done only by NRC licensees or by competent persons under the direction and supervision of the licensee.

Signal-generating systems. Those who work in an area covered by the system's signal must be familiar with the sound.

Lead

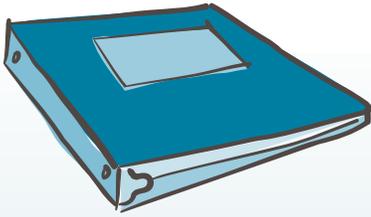
All workers exposed to lead at or above the *action level*, or to lead compounds which may cause skin or eye irritation, must participate in an annual lead-hazards training program covering the following:

- The lead rules (1926.62 for the construction industry, 1910.1025 for general industry) and the appendices
- Operations that could result in exposure to lead above the action level
- The purpose, proper selection, fitting, and use of respirators
- The medical surveillance program and the medical removal protection program
- Engineering controls and work practices
- Any compliance plan in effect



What is an action level?

An action level is the exposure trigger point for a toxic or hazardous substance at which requirements to control exposure come into effect. Action levels vary depending on the nature of the substance.



- Prohibitions against removing lead with chelating agents without the direction of a licensed physician
- Workers' right of access to records

Provide all information and training materials to workers or to OR-OSHA upon request.

Medical services and first aid

If a clinic, hospital, or physician isn't reasonably accessible to the worksite, a first-aid-trained person must be available on site to give first aid.

Methylenedianiline (MDA)

Provide workers with information and training on MDA in accordance with the hazard communication training requirements [1910.1200(h)] at the time of initial assignment and at least annually thereafter.

Make all training program materials available to affected workers, including a copy of the MDA rules. Provide this information to OR-OSHA upon request.

Keep training records for one year beyond the last date of a worker's employment.

Noise Exposure

You must have an annual training program for workers exposed to noise at or above an eight-hour time-weighted average of 85 decibels. The program must be consistent with changes in personal protective equipment and work processes. Workers exposed to high noise levels must be fitted with hearing protectors and trained how to use and care for them.

Provide all training and education program materials to OR-OSHA upon request.

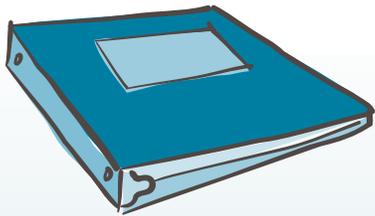
Nonionizing Radiation

Laser equipment. Only qualified and trained workers can install, adjust, and operate laser equipment.

Ventilation

Those who work in and around open-surface tanks must be informed about hazards, appropriate personal protection, and first-aid procedures.

When workers are in areas with high concentrations of air contaminants or oxygen concentrations less than 19.5 percent, they must wear respirators or have an adequate oxygen supply. Those who wear respirators must be trained to use them correctly.



Maritime activities

Longshoring

Provide workers with information and training on hazardous chemicals in their work area at the time of initial assignment and whenever you become aware of a new chemical hazard. Training and information must cover the following:

- The requirements of the longshoring rules
- Operations where hazardous chemicals are present
- The location and availability of the written hazard communication program
- Methods to detect the presence or release of a hazardous chemical
- Chemical hazards in the work area
- Protective measures for hazardous chemicals
- The hazard-communication program
- What to do in the event of a spill or leak of a hazardous chemical from a sealed container

Assessing chemical hazards. Chemical manufacturers and importers must assess the hazards of chemicals they produce or import and employers must provide the information to their workers through training and a hazard communication program.

Machinery operators. Only workers with appropriate training to understand applicable signs, operating instructions, and signal codes are permitted to operate a crane or other powered vehicle or to give signals to the operator.

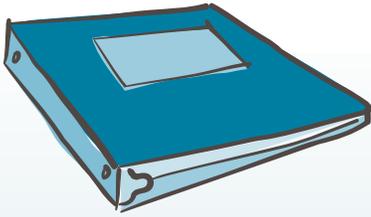
Respiratory protection. If you require workers to wear respiratory protective equipment, train them to use it properly.

Handling hazardous cargo. Before workers begin cargo-handling operations, you must determine what hazardous cargo they will handle and the nature of the hazards. Inform them about the hazards and any special handling precautions that they need to follow.

Marine terminals

Hazard-communication program. Develop, implement, and maintain at the workplace, a written hazard communication program that describes how the criteria for labels, material safety data sheets, and worker training will be met. Information and training must cover the following:

- Operations where hazardous chemicals are present
- Methods to detect the presence or release of a hazardous chemical in the work area



Shipyards

Confined and enclosed spaces. Ensure that each worker who enters a confined or enclosed space is trained to perform all required duties safely. Workers must be trained to do the following:

- Recognize the characteristics of a confined space
- Be aware of hazards during entry and the effects of exposure to the hazard
- Know what personal protective equipment is needed for safe entry work
- Use personal protective equipment correctly
- Be aware of barriers that may be needed to protect an entrant from hazards

Workers must be retrained whenever there is a change in operations or tasks that present new hazards.

Those who work in confined or enclosed spaces must leave when any of the following occurs: an evacuation is ordered, an evacuation alarm is activated, or the workers believe they are in danger.

Certify that those working in confined spaces are properly trained.

Rescue. Workers assigned to shipyard rescue teams must be provided with equipment for confined space rescues and trained to use it. Each worker must be trained to perform all rescue functions. Outside rescue teams must be informed about hazards at your facility.

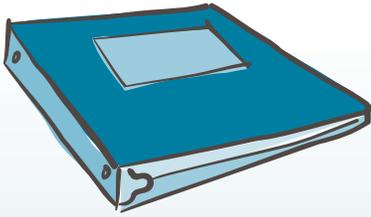
Welding and cutting. When welding, cutting, or heating tasks exceed normal fire-prevention precautions, additional workers must be assigned to prevent a fire. They must be instructed about fire hazards and how to use fire-fighting equipment.

Welding and cutting, use of fuel gas. Instruct workers how to use fuel gas safely.

Arc welding and cutting. Instruct workers in safe arc welding and cutting practices.

Radioactive material. Work involving radioactive material must be done by a competent person. Only Nuclear Regulatory Commission (NRC) licensees or competent persons under supervision of the licensee can work with materials controlled by the NRC.

Hazard communication. Provide workers with information and training on hazardous chemicals in their work area at the time of their initial assignment and whenever you become aware of a new hazard. Training must cover the following:



Class IV work. Training for Class IV work must be equivalent to the Awareness Training Course developed by EPA for those who do maintenance work in buildings with asbestos-containing material. The course must include information on locating presumed asbestos-containing material (PACM), asbestos-containing material (ACM), asbestos-containing flooring material, and recognizing damage, deterioration, and delamination. The course must take at least two hours.

All asbestos training must be conducted so that workers understand the following:

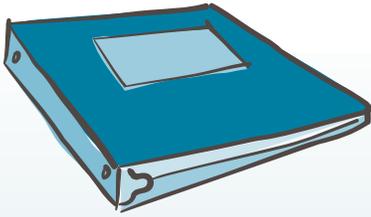
- How to recognize asbestos
- The health effects associated with asbestos exposure
- The relationship between smoking and asbestos in producing lung cancer
- The operations that could result in exposure to asbestos
- The purpose, proper use, fitting instructions, and limitations of respirators
- Appropriate work practices for performing the asbestos job
- Medical surveillance program requirements
- The content of the shipyards rules, including appendices
- How to contact public health organizations that offer quit-smoking programs
- The requirements for posting signs and affixing labels

Access to training materials. Make all information and training materials available to workers and to OR-OSHA upon request.

Training records. Keep worker training records for one year beyond a worker's last employment date.

Training for the qualified person. For Class I and II asbestos work, the qualified person must be trained in all aspects of asbestos removal and handling. For Class III asbestos work, the qualified person must be trained in asbestos-handling procedures, practices for reducing asbestos exposures, use of wet methods, the contents of the shipyards rules (Division 5, 1915), and asbestos identification. All qualified-person training must be obtained through a comprehensive course for supervisors, such as one conducted by an EPA- or state-approved training provider.

Water-spray process system. Workers may use a water-spray process system for removing ACM and PACM from cold line piping if they have completed a 40-hour training course in addition to training required for Class I work.



Crawler, locomotive, and truck cranes

Only workers designated by an employer can operate a crawler, locomotive, or truck crane. When two or more cranes are used to lift a load, one designated person must oversee the operation. This person must instruct workers in proper positioning and rigging of the load.

Overhead and gantry cranes

Fire extinguishers. Operators and maintenance persons must know how to use on-board fire extinguishers.

Maintaining crane hooks. Repairing crane hooks by welding or reshaping isn't recommended; however, if repairs are attempted, they must be done under the supervision of a competent person and the hook must be tested before further use.

Moving the load. When two or more cranes are used to lift a load, a qualified person must supervise the operation and instruct all personnel involved in proper positioning, rigging, and moving the load.

Derricks

Derrick operators and maintenance personnel must know how to use and care for on-board fire extinguishers.

Helicopters

Cargo hooks. All electrically operated cargo hooks must have the activating device properly designed and installed. Ensure that hooks are tested daily by a competent person to determine that the release works properly.

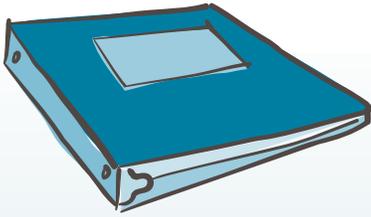
Industrial and commercial vehicles

Only trained and authorized operators can operate commercial or industrial vehicles. You must have specific methods or procedures to train those who operate industrial vehicles for non-highway use.

Powered industrial trucks. Employers must provide powered industrial truck operators with training through programs tailored to: the workers' existing operating skills, the types of industrial trucks the workers run, and hazards the workers are likely to encounter. Refresher training is required if an operator is involved in an accident or near-miss incident, operates the truck in an unsafe manner, or is assigned to operate another type of truck. Operator performance evaluations are required at least once every three years.

Material hoists

Hoisting machines, except those equipped with automotive controls, must be operated by regularly assigned, trained operators.



Personal protective equipment (PPE)

Train workers who use PPE. Training must cover the following:

- When PPE is necessary
- What PPE is necessary
- How to put on, remove, adjust, and wear PPE
- The limitations of PPE
- Care, maintenance, and disposal of PPE

Each worker must understand the training and demonstrate the ability to use PPE properly. Workers must be retrained when they can't demonstrate required skills and when there are changes in the workplace or the PPE that make previous training obsolete.

Certification. Certify that workers have been trained. The certification must include the trainees' names, training dates, and the type of training they received.

Respiratory protection

Train workers to use respirators properly. Training must focus on why a respirator is necessary, the importance of proper fit, a respirator's capabilities and limitations, how to use a respirator in emergency situations, and how to care for it.

New employees who have had respirator training within 12 months of their hire date are exempt from training for their first year on the job if they can demonstrate they know how to use and maintain their respirators.

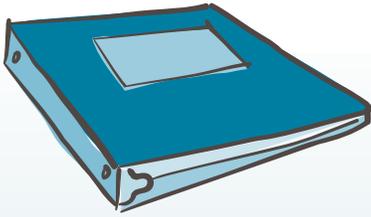
Retraining is required at least annually – sooner if worksite hazards change or if workers switch to another type of respirator. Workers who don't understand how to use or properly care for their respirators must also be retrained.

Any worker not required to wear a respirator who asks to wear one must read 1910.134, Appendix D, *Information for Employees Using Respirators When Not Required Under the Standard*.

Power transmission and distribution

Emergency situations. Workers must be proficient in emergency procedures and first aid. Tree trimmers and linemen doing aerial work must be trained in pole-top rescue. Tree trimmers must also be trained in cardiopulmonary resuscitation.

Two-worker rule. At least two journeymen, or workers with journeyman-equivalent training and experience, must work together on energized high-voltage equipment. While in training, a qualified apprentice may replace one of the journeymen.



- Demonstrate safe techniques for working on or near exposed energized equipment

A worker must have additional training (or retraining) whenever the following occurs:

- A worker isn't complying with safety-related work practices
- Changes in technology, equipment, or procedures require new work practices
- A worker is assigned to do work other than his or her normal job tasks

Certification. Certify that each worker has been trained; the certification must be on file for the duration of the worker's employment.

Cardiopulmonary resuscitation (CPR) and first-aid training.

When anyone works on exposed lines or equipment energized at 50 volts or more, a first-aid- and CPR-trained person must also be on site. If two or more employees are doing field work, at least two first-aid-trained persons must be available. If workers are first-aid- and CPR-trained within three months of their hiring dates, only one person must be available on site. At fixed work locations such as generating stations, each worker exposed to electric-shock hazards must be reachable within four minutes by a first-aid- and CPR-trained person.

Energy control program. You must have an energy-control program to ensure machines are isolated from their energy sources before anyone works on them. Each worker must be trained to recognize hazardous energy sources, isolate them, and control the energy. Workers who use tagout systems must be trained to use them appropriately.

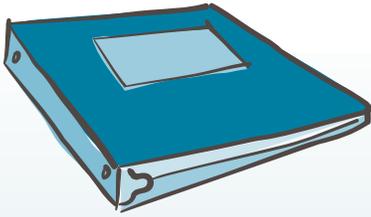
Enclosed spaces. Workers who enter enclosed spaces or who serve as attendants must be trained in enclosed space hazards and entry and rescue procedures.

Grain handling facilities

Train workers annually and whenever changes in their job assignments will expose them to new hazards. They must be trained in the following:

- General safety precautions, including measures to prevent dust accumulation
- Specific job-related safety practices such as cleaning grinding equipment, clearing choked legs, and lockout/tagout procedures

Special tasks. Workers assigned special tasks such as bin entry and handling flammable or toxic substances must be trained to perform the tasks safely.



Post rated-load capacities and instructions for derrick operation on a permanent weather-resistant plate on the derrick where the operator can see them. Make sure that operators are trained as required by 437-002-0228(2), Division 2/N, Crane Operator Training Requirements. Derricks must be inspected by a competent person at least once a year.

High-voltage work. Workers using high voltage to locate trouble or test cables must be instructed in precautions for their own safety and for the safety of coworkers.

Manhole work, first aid. A first-aid-trained person must be immediately available to assist a worker in a manhole who encounters a hazard.

Tree and shrub services

Instruct workers how to use equipment safely. Crews must hold job-safety briefings and agree on work before beginning a tree job. Each tree worker must understand exactly what will be done during a felling operation. Workers must be able to perform cardiopulmonary resuscitation and be trained in tree-top rescue.

Stairways and ladders

Train workers who use ladders and stairways during construction work; workers must recognize ladder and stairway hazards and how to minimize the hazards. They must be trained by a competent person and must understand the following:

- Fall hazards in the work area
- Procedures for erecting, maintaining, and disassembling fall-protection systems
- Proper construction, use, placement, and care of stairways and ladders
- Maximum intended load-carrying capacities of ladders

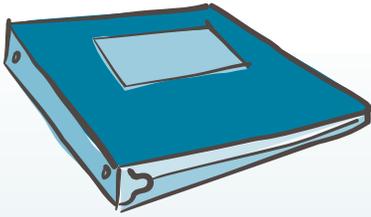
Tools, hand- and power-operated

Only workers who have appropriate tool-specific training can operate a powder-actuated hand tool.

Toxic and hazardous substances

1,2-dibromo-3-chloropropane (DBCP)

You must have a training program for all workers who may be exposed to DBCP. The training program must cover the following:



- Conditions that could cause the release of 2-acetylaminofluorene

Workers must review these requirements at their first training session and annually thereafter.

3,3-Dichlorobenzidine

Workers must be trained in 3,3-dichlorobenzidine hazards before entering a regulated area. Training must cover the following:

- 3,3-dichlorobenzidine's carcinogenic hazards
- Operations involving 3,3-dichlorobenzidine
- The purpose of the medical surveillance program
- Decontamination practices
- Emergency and first-aid procedures
- Conditions that could cause the release of 3,3-dichlorobenzidine

Workers must review these requirements at their first training session and annually thereafter.

4,4-Methylene bis (2-Chloroaniline) [MOCA]

Workers must be trained in MOCA's hazards before entering a regulated area. Training must cover the following:

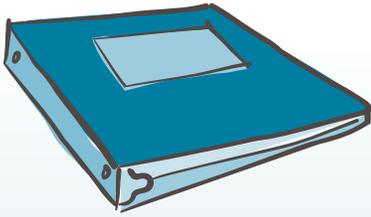
- MOCA's carcinogenic hazards
- Operations involving MOCA
- The purpose of the medical surveillance program
- Decontamination practices
- Emergency procedures and first aid
- Conditions that could cause the release of MOCA

Workers must review these requirements at the first training session and annually thereafter.

4-Aminodiphenyl

Workers must be trained in 4-aminodiphenyl hazards before entering a regulated area. Training must cover the following:

- 4-aminodiphenyl's carcinogenic hazards
- Operations involving 4-aminodiphenyl
- The purpose of the medical surveillance program
- Decontamination practices
- Emergency and first-aid procedures
- Conditions that could cause the release of 4-aminodiphenyl



Workers must review these requirements at their initial training and annually thereafter.

alpha-Naphthylamine

Workers must be trained in alpha-naphthylamine hazards before entering a regulated area. Training must include the following:

- alpha-naphthylamine's carcinogenic hazards
- Operations involving alpha-naphthylamine
- The purpose of the medical surveillance program
- Decontamination practices
- Emergency and first-aid procedures
- Conditions that could cause the release of alpha-naphthylamine

The worker must review these requirements at the first training session and annually thereafter.

Asbestos

General industry. Annually train workers exposed to airborne concentrations of asbestos at or above the permissible exposure limit and excursion limit.

Construction industry. Annually train workers who install asbestos-containing products or do Class I through IV asbestos work.

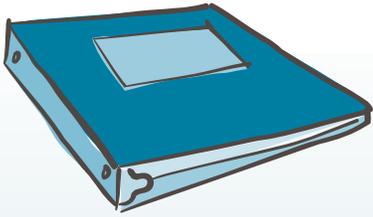
Class I and II work. Training must be equal to the EPA Model Accreditation Plan. Training must be hands-on and at least eight hours.

Class III work. Training must be equivalent to the EPA Operations and Maintenance Course. Training must be at least 16 hours and include hands-on respiratory protection training.

Class IV work. Training must be equivalent to the EPA Awareness Training Course for maintenance and custodial workers who work in buildings with asbestos-containing material. Training must be at least two hours.

All asbestos training must cover the following:

- Methods of recognizing asbestos
- Health effects associated with asbestos exposure
- The relationship between smoking, asbestos, and lung cancer
- Operations that could result in exposure to asbestos
- Proper use of respirators
- Appropriate work practices for asbestos jobs



beta-Naphthylamine

Each worker, before entering a regulated area, must receive annual training that covers the following:

- The carcinogenic hazards of beta-naphthylamine
- Operations involving beta-naphthylamine that could result in exposure
- The purpose of the medical surveillance program
- Decontamination practices
- Emergency and first-aid procedures
- The worker's role in emergency procedures
- Conditions that could result in the release of beta-naphthylamine
- A review of the beta-naphthylamine rules

beta-Propiolactone

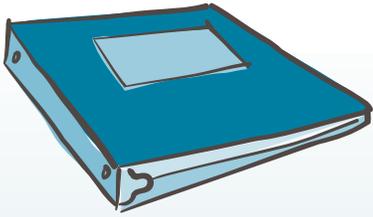
Each worker, before entering a regulated area, must receive annual training covering the following:

- The carcinogenic hazards of beta-propiolactone
- Operations involving beta-propiolactone that could result in exposure
- The purpose of the medical surveillance program
- Decontamination practices
- Emergency and first-aid procedures
- The worker's role in emergency procedures
- Conditions that could result in the release of beta-propiolactone
- A review of the beta-propiolactone rules

bis-Chloromethyl ether

Each worker, before entering a regulated area, must receive annual training that includes the following:

- The carcinogenic hazards of bis-chloromethyl ether
- Operations involving bis-chloromethyl ether that could result in exposure
- The purpose of the medical surveillance program
- Decontamination practices
- Emergency and first-aid procedures
- The employee's role in emergency procedures
- Conditions that may result in the release of bis-chloromethyl ether
- A review of the bis-chloromethyl ether rules



Spills. All spills must be immediately contained and cleaned up by those trained and equipped to work with concentrated infectious material.

Biosafety manual. Prepare a biosafety manual for workers and have them review it annually.

Cadmium

Train all workers who do work involving potential exposure to cadmium. Training must be annual and cover the following:

- Health hazards associated with cadmium exposure
- Operations that could result in exposure to cadmium
- How workers can protect themselves from cadmium exposure
- The proper use of respirators and protective clothing
- The purpose of the medical surveillance program

You must also comply with the training requirements of OR-OSHA's hazard communication rules.

Certify that workers have been trained; document trainees' names, the trainer's signature, and the training dates. Keep the records for one year.

Coke-oven emissions

You must have an annual training program for workers exposed to coke-oven emissions that covers the following:

- The information contained in the substance information sheet for coke-oven emissions (1910.1029, Appendix A)
- The purpose, proper use, and limitations of respirators
- A review of the coke-oven emissions rules
- Access to training materials

Provide all materials relating to the training program to OR-OSHA upon request.

Cotton dust

Annually, train all workers exposed to cotton dust. Training must include the following:

- Acute and long-term health hazards associated with cotton dust exposure
- Jobs and processes that could result in exposure to cotton dust at or above the permissible exposure limit
- Measures necessary to protect the employee from exposures in excess of the permissible exposure limit
- Using respirators



Information and training. Workers assigned to areas where formaldehyde exposure is at or above 0.1 ppm must participate in a training program before initial assignment or before new exposures to formaldehyde. Training must be repeated annually, covering the following:

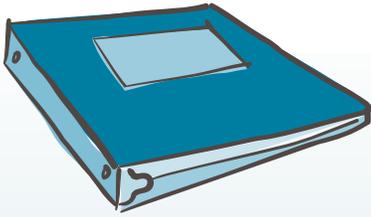
- The contents of the material safety data sheet
- The purpose of the medical surveillance program
- Health hazards associated with formaldehyde exposure
- The signs and symptoms of formaldehyde exposure
- Instructions to immediately report any symptoms attributable to formaldehyde
- A description of operations where formaldehyde is present
- Safe work practices for limiting exposure to formaldehyde
- Use of personal protective clothing and equipment
- Instructions for handling spills and dealing with emergencies
- A description of clean-up procedures
- The importance of engineering and work practice controls
- Emergency procedures including the specific duties of each worker

Access to training materials. Inform workers where written training materials are located.

Hazard communication

Employers must provide workers with training and information on hazardous chemicals in their work areas at the time of initial assignment and whenever a new hazard is introduced. Training and information must cover the following:

- The requirements of the hazard communication standard (Division 2, Subdivision Z, 1910.1200)
- Operations where hazardous chemicals are present
- The location of the written hazard communication program
- Methods to detect the presence or release of hazardous chemicals in the work area
- Hazards of chemicals used in the work area
- How workers can protect themselves from chemical hazards, including spills or leaks from sealed containers



Lead

All workers exposed to lead at or above the action level or to lead compounds that may cause skin or eye irritation, must participate in an annual lead-hazards training program covering the following:

- The lead rules (1926.62 for the construction industry, 1910.1025 for general industry) and the appendices
- Operations that could result in exposure to lead above the action level
- The purpose, proper selection, fitting, and use of respirators
- The medical surveillance program and the medical removal protection program
- Engineering controls and work practices
- Any compliance plan in effect
- Prohibitions against removing lead with chelating agents without the direction of a licensed physician
- Workers' right of access to records

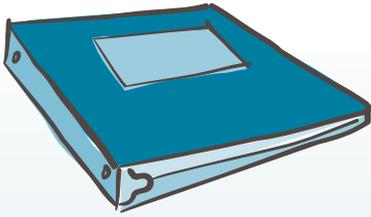
Provide all information and training materials to workers or to OR-OSHA upon request.

Methyl chloromethyl ether

Before entering a regulated area workers must receive training in the following:

- Methyl chloromethyl ether's carcinogenic hazards
- Operations involving methyl chloromethyl ether
- The purpose of the medical surveillance program
- Decontamination practices and purposes
- Emergency practices and procedures
- Recognizing situations that may result in the release of methyl chloromethyl ether
- First-aid procedures
- A review of the methyl chloromethyl ether rules at the worker's first training and annually thereafter

Containers of methyl chloromethyl ether handled by persons other than authorized workers must be identified with full chemical names and Chemical Abstracts Service Registry numbers.



Thiram

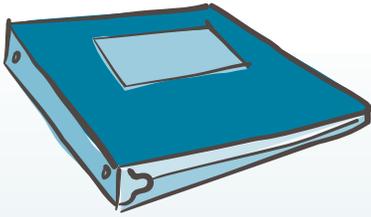
Workers exposed to thiram must receive handling and safe-use training covering the following:

- Health hazards of chronic thiram exposure
- Operations that could result in exposure to thiram
- The purpose for, proper use of, and limitations of personal protective equipment
- Thiram's toxic and skin irritation effects
- The necessity for effective personal hygiene
- A review of OR-OSHA's thiram rule (Division 2, Subdivision Z, 437-002-0373) at the worker's first training and annually thereafter

Vinyl chloride

Persons working with vinyl chloride or polyvinyl chloride (before conversion to a fabricated product) must be trained in its hazards and safe use precautions. Training must cover the following:

- Health hazards of chronic vinyl chloride exposure
- Operations that could expose workers to vinyl chloride in excess of the permissible exposure limit
- The purpose for, proper use of, and limitations of personal protective equipment
- Vinyl chloride fire hazards
- Monitoring and medical surveillance programs
- Emergency procedures
- Conditions that may result in the release of vinyl chloride
- A review of the vinyl chloride rule (Division 2, Subdivision Z, 1910.1017) at the workers' first training and annually thereafter



Welding, cutting, and brazing

Cutters, welders, and their supervisors must be trained to operate their equipment safely. Arc welding equipment operators must be trained in the following safe arc-welding practices:

- To remove electrodes from holders (when holders are not used) and place the holders so they will not contact workers or conducting objects
- To not dip hot electrode holders in water
- To open the power supply switch to the equipment when an arc welder or cutter leaves the work area or when the arc welding or cutting machine is moved
- To report any faulty or defective equipment to a supervisor

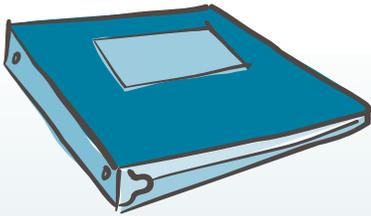
Those in charge of oxygen or fuel-gas supply equipment and oxygen or fuel-gas distribution piping systems must be instructed about their responsibilities before being left in charge. Operation and maintenance instructions must be readily available.

When regulators or parts of regulators, including gauges, need repair, the work must be performed by trained, skilled mechanics.

Using fuel gas. Workers must have training to use fuel gas safely. Training should include the following:

- Before a cylinder valve regulator is connected, the valve must be opened slightly and closed immediately.
- The cylinder valve must always be opened slowly to prevent damage to the regulator.
- Fuel gas must not be used from cylinders through torches equipped with shutoff valves without reducing pressure through a regulator attached to the cylinder valve.
- Before a regulator is removed from a cylinder valve, the valve must be closed and the gas released from the regulator.
- If there is a leak around the valve stem when the valve on a fuel gas cylinder is opened, the valve must be closed and the gland nut tightened.
- If a leak develops at a fuse plug or other safety device, the cylinder must be removed from the work area.

Fire watchers. When welding, cutting, or heating work exceeds normal fire prevention precautions, at least one other worker must watch to ensure that a fire does not start. Fire watchers must be instructed about fire hazards and how to use fire-fighting equipment.



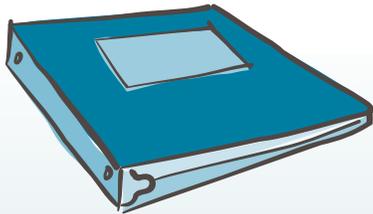
Training requirements by topic and rule

Topic	Division	Paragraph
<i>Agricultural operations and farming</i>		
Worksite inspections		
Inspections by competent person	4 A	437-004-0099(3)
Hazard communication		
Information and training	4 Z	437-004-9800(7)
Hazardous energy control		
Training and communication	4 J	437-004-1275(5)(g)
Medical services and first aid		
Emergency medical plan	4 K	437-004-1305(4)(c)
Pesticides, handling and applying		
Applying pesticides, farms and forests	4 W	170.110(a)
Applying pesticides, greenhouses	4 W	170.110(c)(1)
Applying pesticides, nurseries	4 W	170.110(b)
Equipment, safe operation	4 W	170.234(a)
Heat-related illness, prevention	4 W	170.112(c)(6)(x)
Personal protective equipment, use	4 W	170.112(c)(6)(ix)
Pesticide contacting workers	4 W	170.210(a)
Pesticide safety training, handlers	4 W	170.230
Pesticide safety training, workers	4 W	170.130
Respiratory protection		
Procedures	4 I	437-004-1040(5)(c)
Program requirements	4 I	437-004-1040(2)(c)
Storage ponds, vats, pits		
Tests by competent person	4 J	437-004-1260(2)(a)(A)
<i>Blasting and use of explosives</i>		
Blaster qualifications		
Qualifications	3 U	1926.901
Firing the blast		
Blasting signals	3 U	1926.909(a)
Transporting explosives		
Fire extinguisher training	3 U	1926.902(i)
Vehicle attendant training	2 H	1910.109(d)(3)(iii)
<i>Commercial diving operations</i>		
Qualifications of dive team		
Assignments	2 T	1910.410(b)
Designated person-in-charge	2 T	1910.410(c)(2)
Qualifications of dive team	2 T	1910.410(a)
<i>Crane operations</i>		
Cranes, crawler locomotive and truck		
Moving the load	2 N	1910.180(h)(3)(xii)
Cranes, derricks, hoists, elevators, and conveyors		
Crane operator training requirements	3 N	437-003-0081
Wind velocity device	3 N	437-003-0080(2)(b)
Cranes, Oregon general requirements for		
Crane operator training requirements	2 N	437-002-0228(2)
Cranes, overhead and gantry		
Fire extinguishers	2 N	1910.179(o)(3)
Maintenance, crane hooks	2 N	1910.179(l)(3)(iii)(a)
Moving the load	2 N	1910.179(n)(3)(ix)
<i>Electrical</i>		
Training		
Training requirements	2 S	1910.332
<i>Excavations, trenching, and shoring</i>		
Specific excavation requirements		
Stability of adjacent structures	3 P	1926.651(i)(2)
Specific trenching requirements		
Protection of employees in excavations	3 P	1926.652(a)(1)(ii)



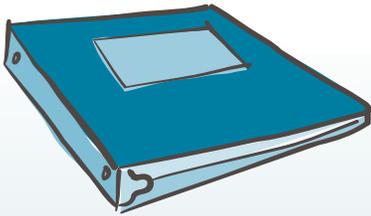
Training requirements by topic and rule

Topic	Division	Paragraph
<i>General environmental controls</i>		
Accident prevention signs and tags		
Caution signs	2 J	1910.145(c)(2)
Danger signs	2 J	1910.145(c)(1)
Safety instruction, signs	2 J	1910.145(c)(3)
Confined spaces, permit-required		
Rescue and emergency services	2 J	1910.146(k)(1)
Training	2 J	1910.146(g)
Training certification	2 J	1910.146(g)(4)
Training, entry operations	2 J	1910.146(d)(8)
Hazardous energy control (lockout/tagout)		
Energy control program	2 J	1910.147(c)(1)
Lockout or tagout devices removal	2 J	1910.147(e)(3)
Training and communication	2 J	1910.147(c)(7)
<i>General safety and health provisions</i>		
Safety training and education (construction)		
Employer's responsibility	3 C	1926.21(b)
General requirements	3 C	1926.21(a)
<i>Hazardous materials</i>		
Blasting and use of explosives		
Operation of transportation vehicles	2 H	1910.109(d)(3)(iii)
Flammable and combustible liquids		
Tank storage, information for station operators	2 H	1910.106(b)(5)(vi)(v)(3)
Hazardous-waste operations and emergency response		
Hazardous waste operations and emergency response	2 H	1910.120(q)(2)
Hazardous waste operations and emergency response	2 H	1910.120(q)(3)(vii)
Post-emergency response operations	2 H	1910.120(q)(11)(ii)
Procedures for handling emergency incidents	2 H	1910.120(l)(3)(iv)
Refresher training	2 H	1910.120(q)(8)
Risk identification	2 H	1910.120(c)(7)
Skilled support personnel	2 H	1910.120(q)(4)
Specialist employees	2 H	1910.120(q)(5)
Trainers	2 H	1910.120(q)(7)
Training	2 H	1910.120(e)
Training	2 H	1910.120(q)(6)
Hazardous waste operations: treatment, storage, disposal		
Emergency response program	2 H	1910.120(p)(8)
Hazardous waste operations and emergency response	2 H	1910.120(p)(8)(iii)
Training program	2 H	1910.120(p)(7)
Hydrogen		
Liquefied hydrogen systems, operating instructions	2 H	1910.103(c)(4)
Liquefied petroleum gases, storage and handling		
Operation, and maintenance work, instruction	2 H	1910.110(b)(16)
Systems not using DOT containers	2 H	1910.110(d)(12)(i)
Process safety management, hazardous chemicals		
Contract employer responsibilities	2 H	1910.119(h)(3)(i)
Training	2 H	1910.119(g)
Training for process maintenance activities	2 H	1910.119(j)(3)
Reinforced plastics manufacturing		
Employee information and training	2 H	437-002-0118(6)
Eye protection	2 H	437-002-0118(7)(c)(B)
Warning signs and labels	2 H	437-002-0118(8)(a)



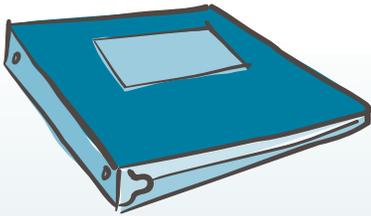
Training requirements by topic and rule

Topic	Division	Paragraph
Marine terminals		
Cranes and derricks, high wind conditions	5 C	1917.45(g)(3)(iii)
Employee training, multi-piece rim wheels	5 C	1917.44(o)(3)
Hazard communication, assessing the hazards of chemicals	5 B	1917.28
* <i>see</i>	2 Z	1910.1200(b)(1)
Hazard communication, employee information and training	5 B	1917.28
* <i>see</i>	2 Z	1910.1200(h)
Hazard communication, sealed container spills	5 B	1917.28
* <i>see</i>	2 Z	1910.1200(b)(4)(iii)
Hazard communication, transmittal of information	5 B	1917.28
* <i>see</i>	2 Z	1910.1200(a)(10)
Hazardous atmospheres, entering confined spaces	5 B	1917.23(d)(2)
Hazardous cargo	5 B	1917.22(a)
Tanks in terminal areas, entry hazards	5 D	1917.73(d)
Shipyards employment		
Arc welding and cutting, instructions	5 D	1915.56(d)
Asbestos, access to training materials	5 Z	1915.1001(k)(10)
Asbestos, class IV work	5 Z	1915.1001(g)(10)
Asbestos, employee information and training	5 Z	1915.1001(k)(9)
Asbestos, pulmonary function testing	5 Z	1915.1001(m)(1)(ii)(B)
Asbestos, removing vinyl and asphalt flooring/deck materials	5 Z	1915.1001(g)(8)(i)
Asbestos, training for the competent person	5 Z	1915.1001(o)(4)(i)
Asbestos, training records	5 Z	1915.1001(n)(4)
Asbestos, water spray process system	5 Z	1915.1001(g)(5)(v)
Cadmium, employee information and training	5 Z	1915.1027
Cadmium, hazard communication	5 Z	1915.1027
Cadmium, training certification	5 Z	1915.1027
Competent person designated by employer	5 A	1915.7(b)(2)(i)
Confined spaces, entry training	5 B	1915.12(d)
Fire prevention, welding and cutting	5 D	1915.52(b)(3)
Hazard communication	5 F	1915.1200
Hazard communication, employee information and training	5 F	1915.1200
Power-actuated tools	5 H	1915.135(c)
Radioactive material, use of	5 D	1915.57(b)
Rescue teams	5 B	1915.12(e)(1)
Respiratory protective equipment	5 I	1915.152(e)(4)
Rigging and materials handling	5 G	1915.117(b)
Welding and cutting, use of fuel gas	5 D	1915.55(d)
Materials handling and storage		
Cranes, crawler locomotive and truck		
Moving the load	2 N	1910.180(h)(3)(xii)
Cranes, Oregon general requirements for		
Crane operator training requirements	2 N	437-002-0228(2)
Cranes, overhead and gantry		
Fire extinguishers	2 N	1910.179(o)(3)
Maintenance, crane hooks	2 N	1910.179(l)(3)(iii)(a)
Moving the load	2 N	1910.179(n)(3)(ix)
Derricks		
Fire extinguishers	2 N	1910.181(j)(3)(ii)
Helicopters		
Cargo hooks	2 N	1910.183(d)
Industrial and commercial vehicles		
Operation of vehicles	2 N	437-002-0223(3)(c)
Industrial trucks, powered		
Operator training	2 N	1910.178(l)



Training requirements by topic and rule

Topic	Division	Paragraph
Laundry machinery and operations		
Instruction of employees	2 R	1910.264(d)(1)(v)
Ornamental tree and shrub services		
CPR and tree-top rescue, training	2 R	437-002-0304
Felling operations	2 R	437-002-0310(5)(c)
Training and work planning	2 R	437-002-0303
Pulp, paper and paperboard mills		
Employee training, general	2 R	437-002-0312(2)
Handling chlorine dioxide	2 R	437-002-0312(9)(e)(H)
Handling sodium chlorate	2 R	437-002-0312(9)(f)
Industrial kiln guns and ammunition	2 R	437-002-0312(8)(a)
Recovery furnace areas	2 R	437-002-0312(8)(x)(B)
Telecommunications		
Cable fault locating and testing	2 R	1910.268(l)
Derrick training	2 R	1910.268(j)(4)(iv)(D)
Derrick training	2 R	437-002-0316(7)
Handling storage batteries	2 R	1910.268(b)(2)
Joint power and telecommunication manholes, first aid	2 R	1910.268(o)(3)
Manhole work, first aid	2 R	1910.268(o)(1)(ii)
Training, general requirements	2 R	1910.268(c)
<i>Stairways and ladders</i>		
Training		
Training requirements	3 X	1926.1060
<i>Tools, hand- and power-operated</i>		
Hand tools, powder-actuated		
Powder-actuated tools	3 I	1926.302(e)(1)
<i>Toxic and hazardous substances</i>		
1,2-dibromo-3-chloropropane		
Training program	2 Z	1910.1044(n)(1)
1,3, butadiene		
Employee information and training	2 Z	1910.1051(l)(2)
2-Acetylaminofluorene		
Training and indoctrination	2 Z	1910.1003(e)(5)
3,3'-Dichlorobenzidine (and its salts)		
Training and indoctrination	2 Z	1910.1003(e)(5)
4,4'-Methylene bis (2-chloroaniline) [MOCA]		
Training and indoctrination	2 Z	437-002-0364(5)(e)
4-Aminodiphenyl		
Training and indoctrination	2 Z	1910.1003(e)(5)
4-Dimethylaminoazobenzene		
Signs, information and training	2 Z	1910.1003(e)
4-Nitrobiphenyl		
Training and indoctrination	2 Z	1910.1003(e)(5)
Acrylonitrile		
Training program	2 Z	1910.1045(o)(1)
alpha-Naphthylamine		
Training and indoctrination	2 Z	1910.1003(e)(5)
Asbestos		
Employee information and training	2 Z	1910.1001(j)(7)
Employee information and training	3 Z	1926.1101(k)(9)
Pulmonary function testing	2 Z	1910.1001(l)(1)(ii)(B)
Pulmonary function testing	3 Z	1926.1101(m)(1)(ii)(B)
Training for the competent person	3 Z	1926.1101(o)(4)
Training records	2 Z	1910.1001(m)(4)
Training records	3 Z	1926.1101(n)(4)



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437, Division 1, Rule 0760, General Provisions. Through class discussion and exercises, this workshop addresses the many compliance aspects of the rule, the practical application of each section of the rule, and the subsequent evaluation of the positive impact on the safety environment.

115 Training for Safety and Success

Most supervisors and managers are required to take charge of on-the-job training (OJT) for new hires or new processes. Achieve greater effect by exploring the characteristics of good safety training. Discuss ways in which processes can be improved through job analysis.

116 Safety & Health Program Evaluation

The ability to critique the functioning level of your safety and health program is crucial to ongoing improvement. Safety and Health Program Evaluation can help you conduct this assessment if you want to become a SHARP or VPP participant, or you want to improve your ability to manage safety and health in your organization. This is an advanced workshop.

117 Industrial Hygiene for the Non-IH

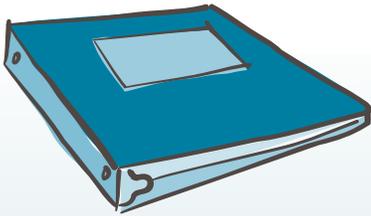
Introduces the participants to the role an industrial hygienist plays as part of the workplace safety and health team. Lecture format. What is an IH, what an IH knows so that you don't have to, role of the safety committee, and review of major hazard categories of special concern to the IH.

118 Safety Leadership

What is safety leadership? This workshop will help answer that question by introducing participants to the concepts of effective leadership models and the attributes of effective safety leadership. Through discussion and group exercise, the workshop will focus on methods and strategies to develop working relationships between workers and management that will motivate and result in appropriate safety behaviors at all levels of the organization.

119 Developing an Effective Accountability System

Establishing a credible culture of accountability in the workplace is crucial to a successful safety program. This workshop will introduce the participant to the concepts and principles of accountability within the safety context and the five critical elements of an effective safety accountability system. Through discussion and group exercise, participants will gain greater insight into the importance of balanced accountability that includes recognition as well as discipline.



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217 Hearing Conservation Program

This workshop provides an overview of an effective approach to preserving one's hearing over of a lifetime of work and play. It covers the elements of an effective hearing conservation program, how sound can damage hearing, and what actions can be taken to prevent hearing loss.

219 Machine Guarding Principles

Gives participants a greater understanding of the principles and methods of machine guarding to help them assess workplace hazards more effectively and select machine guarding strategies to eliminate those hazards. Through guided discussion and exercises, participants address effective machine guarding methods for various equipment and machinery

221 Powered Industrial Truck Safety

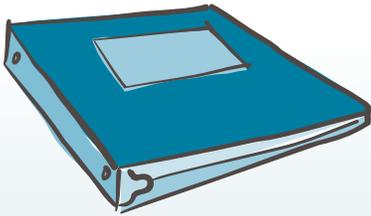
With over one million forklifts operating in the U.S. today, safe operations and effective operator training are top priorities. This workshop introduces participants to OSHA's Powered Industrial Truck Standard and includes an in-depth review of operator training. Safe work practices and other topics not specifically addressed in the standard are also discussed, including center of gravity, fulcrum point, and seat restraints. This session will also help attendees develop an industrial truck training program.

301 Fall Protection

Participants will learn fall protection principles and codes (Division 3, Subpart M) and gain a better understanding of fall-protection systems and methods. Also covers requirements for safe work procedures in the construction industry. Participants will learn where and why fall protection is required, discuss how to select the best method of fall protection, plan for a rescue, pre-plan on-site fall protection, and learn the use and limitations of a fall-arrest system.

302 Excavation Safety

Participants learn how to apply Part P - Excavation Rules, understand the role of the "competent person," recognize excavation danger signals, and demonstrate soil analysis procedures. Designed for safety officers, safety committee members, on-site supervisors, managers, and others who may be involved in excavation work.



Internet Courses

OR-OSHA Internet Courses:

100 Safety & Health Management Planning

Modules: 7

Many companies today operate reactive safety and health programs that don't work. Learn how to develop a proactive program using methods that do work. This course discusses seven critical areas of a successful occupational safety and health program. Subjects include top management commitment, accountability, employee involvement, training, hazard identification and control, accident investigation, and continuous safety improvement.

101 Safety Committee Operations

Modules: 5

Every company can benefit from an effective safety committee. Unfortunately, most safety committees do not understand their purpose or the role they play in helping management to provide a safe and healthful workplace. This course helps the student understand his or her responsibilities as a safety committee member. It will help the safety committee chairperson successfully lead a safety committee.

102 Accident Investigation

Modules: 7

Investigating incidents and accidents is a very important activity to ensure that surface and root causes are identified and effectively eliminated or reduced so that similar accidents may be prevented. This course introduces the student to a simple yet extremely effective three-step procedure to gather information, analyze facts and write the accident report.

104 Hazard Identification and Control

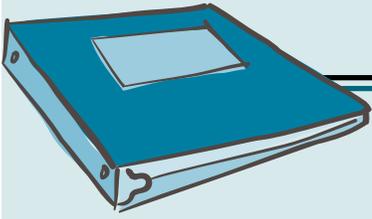
Modules: 5

Safety directors, safety committee members, supervisors, and managers will gain a greater ability to identify the various categories of hazards in their workplaces and apply strategies to eliminate or reduce hazards. Emphasis on applying the "hierarchy" of controls: strategies to eliminate hazards.

112 Safety and the Supervisor

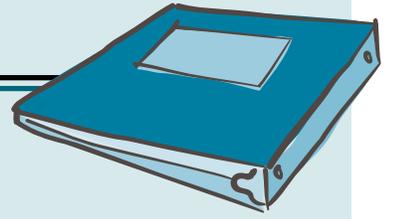
Modules: 4

This course will help new supervisors gain a greater understanding of their responsibility to provide a safe and healthful work area, regular oversight, adequate safety training, and accountability. Emphasis on how to carry out these responsibilities and the components of an effective accountability system.



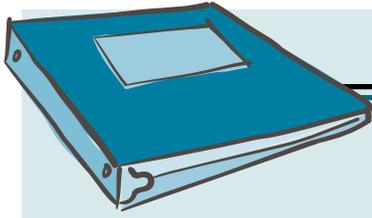
Notes





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Notes



OR-OSHA Services

OR-OSHA offers a wide variety of safety and health services to employers and employees:

Consultative Services

- Offers no-cost on-site safety and health assistance to Oregon employers for help in recognizing and correcting safety and health problems in their workplaces.
- Provides consultations in the areas of safety, industrial hygiene, ergonomics, occupational safety and health programs, new business assistance, and the Safety and Health Achievement Recognition Program (SHARP).

Enforcement

- Offers pre-job conferences for mobile employers in industries such as logging and construction.
- Provides abatement assistance to employers who have received citations, and provides compliance and technical assistance by phone.
- Inspects places of employment for occupational safety and health rule violations and investigates workplace safety and health complaints and accidents.

Standards & Technical Resources

- Develops, interprets, and provides technical advice on safety and health standards.
- Provides copies of all OR-OSHA occupational safety and health standards.
- Publishes booklets, pamphlets, and other materials to assist in the implementation of safety and health standards and programs.
- Operates a Resource Center containing books, topical files, technical periodicals, a video and film lending library, and more than 200 databases.

Public Education & Conferences

- Conducts conferences, seminars, workshops, and rule forums.
- Coordinates and provides technical training on such topics like confined space, ergonomics, lockout/tagout, and excavations.
- Provides workshops covering basic safety and health program management, safety committees, accident investigation, and job safety analysis.
- Manages the Voluntary Protection Program and the Safety and Health Education and Training Grant Program, which awards grants to industrial and labor groups to develop occupational safety and health training materials for Oregon workers.

For more information, call the OR-OSHA office nearest you

(All phone numbers are voice and TTY.)

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