



## Accident Prevention for Workplace Hazards

### *Meeting Objectives*

This training session will help employees understand their important role in preventing workplace injuries and illnesses. They will learn how to identify workplace hazards that could contribute to a workplace injury. Employees will also learn what steps they can take to reduce exposure to those hazards in order to prevent accidents.

### *Suggested materials:*

- Inspection checklists developed by your company
- Safety committee meeting minutes
- Safety suggestion form

### *Safety rules established by your company*

### Introduction/Overview

Each year more than 6,000 Americans are killed on the job and about 3.6 million suffer disabling injuries. An employer with an effective safety and health program will work with employees to look beyond the specific requirements of OSHA ([Occupational Safety and Health Administration](#)) regulations and make an effort to prevent accidents by seeking out all workplace hazards and then taking steps to eliminate those hazards.

In fact, OSHA's General Duty Clause requires employers to go beyond the specific requirements of OSHA's standards in order to help prevent job-related injuries, illnesses, and fatalities. In this training session, we will discuss how employees can work together with management to identify and eliminate workplace hazards in order to prevent accidents. Some of the ways employees can be involved with accident prevention include:

- Be on the Safety Committee
- Conduct Job Hazard Assessments
- Conduct routine Equipment and Facility Inspections
- Develop and follow Safety Rules
- Encourage Safe Behavior in other employees
- Submit Safety Suggestions
- Wear required Personal Protective Equipment (PPE)

### OSHA Regulations | General Duty Clause

The General Duty Clause is part of the original Occupational Safety and Health (OSH) Act, Section 5(a) (1).

*"Each employer shall furnish to each of his employees employment and a place of employment which is free from recognized hazards that are causing or likely to cause death or serious physical harm to his employees."* The

General Duty Clause requires employers to go beyond the requirements of specific OSHA regulations to seek out and control hazards that are not addressed in a specific OSHA regulation. By doing this training, your employer is asking for help from employees to evaluate the workplace for hazards such as:

- Hazardous equipment
- Hazardous work practices and procedures



- Hazardous working conditions

### Specific OSHA Regulations

OSHA has already identified a number of workplace hazards and developed standards that employers must meet in order to protect their employees from those specific hazards. You are probably already aware of many of OSHA's specific standards because of previous safety training. Here are just a few examples of the hazards identified by OSHA and the safety standards that were developed in response to the hazards:

<b>Workplace Hazard</b>	<b>OSHA Standard</b>
Working with chemicals	Hazard Communication Standard
Working in confined spaces	Confined Spaces Standard
Loud noise in the workplace	Hearing Conservation Standard
Chemical spills	Emergency Response Standard
Fire	Emergency Action & Fire Prevention Standard
Hazards of machinery	Machine Guarding Standard
Falling from heights	Fall Protection Standard
Hazards of energy sources	Lock Out/Tag Out Standard

Although OSHA has developed a number of standards to protect workers from many workplace hazards, OSHA cannot possibly identify all the hazards in every workplace and develop standards to protect workers. That is why management and employees must work together to identify hazards in their own workplace and take steps to prevent injuries and illnesses.

### *Employee Involvement*

Employees play a critical role in the prevention of workplace accidents. Because you, as employees, do the job every day, you know better than anyone else what could potentially result in a workplace injury or illness.

- You know about the near misses and minor first-aid injuries that employees in your work area suffer.
- You know if safe work practices developed for your job are actually effective in preventing accidents or if they need to be improved.
- You know if the floor in your area gets slippery, and you know about common trip hazards in your area.
- You know if the personal protective equipment (PPE) provided for your job provides adequate protection.
- You know if the safety equipment (fire extinguishers, eyewash station) in your area is accessible and in good condition.
- You know the machinery and equipment that you work with. You know if guards are missing or if extra guarding should be added. You also know if the machine is performing as safely as it should be.
- You know the tricks that make your job easier and safer.
- You know which items in your area are heavy and should be lifted only with material-handling aids.

To prevent accidents, management must tap into this vast source of workplace knowledge.



### *Identifying Hazards*

Accident prevention requires the teamwork of all employees and management to evaluate equipment, work procedures, workplace behaviors, and the general work area for hazards that could potentially cause injuries or illnesses.

### *Safety Suggestions*

One of the more common methods of identifying and correcting workplace hazards is through a safety suggestion program. It is important for management to instill a culture in which employees feel comfortable about providing ideas and suggestions for improving workplace safety.

Management must provide a means or forum for employees to submit safety suggestions such as a suggestion box, suggestion forms, or weekly meetings to discuss ideas.

Discuss how employees can provide suggestions in your workplace.

Management must also follow up on all employee suggestions and ideas. When management is committed to evaluating all ideas and quickly implementing effective ideas, employees will realize that their input is important. Employees will then be encouraged to provide more and more suggestions.

Discuss how quickly management follows up on your safety suggestions. Discuss safety changes that have been implemented because of employee safety suggestions.

The following is a short list of questions that can be used to help employees think about the potential hazards in their work areas that could result in an injury or illness if not corrected.

- Are employees required to lift heavy items without the use of material- handling aids?
- Are employees wearing proper PPE when using chemicals?
- Are exits or fire extinguishers blocked in your work area?
- Are forklifts and other vehicles driven at safe speeds in the work area?
- Are there any exposed machinery hazards (pinch points, moving parts, etc.) in your work area?
- Are there any potential ignition sources in your area?
- Can you think of any slip or trip hazards in your work area?
- Do you work with sharp tools such as box knives?

Have employees review this list and think of at least two potential hazards that should be corrected. Write down any suggestions that employees in this meeting have for improving safety in your workplace.

### *Safety Committee*

Safety committees allow management and employees to come together and work for a common cause—safety. Discuss which employees and management are currently on the safety committee in your workplace.

Although safety committees are slightly different in every workplace, they all have some common functions and goals. Employee participation is critical to a successful committee. Some common duties and responsibilities of a safety committee and how employees can make an impact are listed below:

- Accident investigations—The safety committee may be charged with evaluating accident investigations and looking for ways to prevent that accident or a similar one from happening again. Employees can



provide valuable insight on how the accident occurred and what steps led up to the accident as well as what steps to take in order to prevent the accident from reoccurring.

- Corrective actions—The safety committee may be charged with following up on corrective actions to make sure they have been implemented in a timely manner. Participating employees have the chance to keep management accountable for correcting unsafe conditions in order to prevent potential injuries and illnesses.
- Safe work practices—The safety committee may be required to develop or at least review safe work practices. The employees participating on the safety committee will know if the safe work practices can be implemented as described and if they will prevent workplace injuries and illnesses.
- Safety and health programs—The safety committee may be required to develop, or at least review, written safety and health programs. Employee participation is important in making sure the written programs reflect actual working conditions, can be implemented effectively, and will actually improve workplace safety.
- Safety suggestions—The safety committee may be required to evaluate the safety suggestions provided by other employees. Employees participating on the committee have a say in whether or not a safety suggestion is implemented.

Discuss other specific objectives of your company's safety committee and how they relate to preventing injuries and illnesses. Without the valuable input from employees, the safety committee will not be nearly as effective in accident prevention as it should be. Discuss how employees can get involved with the safety committee at your company.

### *Safety Meeting Participation*

Another way for employees to contribute to accident prevention is by actively participating in regular safety meetings and training sessions. Participation goes beyond just paying attention or staying awake. Here are some examples of how you can actively participate in safety meeting in order to help prevent injuries and illnesses in your workplace.

- Give a safety suggestion that relates to the topic being discussed.
- Share a story about a worker who suffered an injury related to the topic being discussed.
- Share an example of how you think the information will prevent accidents.
- Think about how the information in the safety meeting can be used to improve the safety in your specific work area.

When employees participate in safety training and safety meetings, everyone learns more about accident prevention.

### *Workplace Evaluation*

A key part of accident prevention is to evaluate your work area on a regular basis. A quick walk-through of your work area every day before you start your shift will go a long way toward preventing accidents. Consider working with your safety committee and management in developing a simple checklist.

Some of the items to check when doing your daily walk-through include:

- Are chemical containers such as drums, tanks, and pipes not leaking?
- Are electrical panels closed and easily accessible?
- Are emergency phone numbers and evacuation routes posted?
- Are emergency shower and eyewash stations in good condition?



- Are evacuation routes clear and exits clearly marked?
- Are fire extinguishers accessible and fully charged?
- Are first-aid kits well stocked?
- Are guardrails, stairs, and ladders in good condition?
- Are there slips and trip hazards—such as water on the floor or electrical cords?
- Is good housekeeping maintained?
- Is the chemical spill kit fully stocked and accessible?

Discuss additional items that should be checked on a regular basis in your work areas.

### *Inspecting Equipment and Machinery*

Prevent accidents related to equipment and machinery by doing a quick inspection prior to using the equipment. Consider developing a simple inspection checklist for machinery that is used every day and even for handheld power tools that are used on a regular basis.

Some of the items to include on a machinery checklist include:

- Are electrical cords in good condition?
- Are emergency stops in good working condition?
- Are machine guards in place?
- Are warning lights and buzzers working properly?
- Is electrical conduit properly attached—with no exposed wires?
- Is the area around the machine free of slip and trip hazards?

Discuss additional items that should be checked before using powered equipment or machinery.

### Evaluate Work Practices

Another excellent way to prevent injuries and illnesses is to evaluate standard work practices in an attempt to identify potential hazards. This process is often called a Job Hazard Assessment or Job Safety Assessment.

A formal approach to evaluating the hazards of your everyday job involves a three-step process:

- Break down each job that you do into component tasks or steps.
  - For example, component tasks for someone who works in a cabinet-making shop might include selecting wood, putting wood on the table saw, cutting wood, or sanding wood.
- Discuss component tasks or steps that your employees do in their daily jobs.
- Discuss some hazards associated with the component job tasks that your employees are exposed to.
- For each hazard identified, determine how to control the hazards in order to prevent injury. Controls for the cabinet maker might include wearing gloves, using a tool to push wood through the blade, wearing safety glasses, installing a dust collection system, etc.
- Identify all the potential hazards of each task and each job step. Look for unsafe work practices or habits. For example, the cabinet maker might have hazards such as wood splinters when selecting wood, a sharp saw blade and flying dust when cutting wood, a back strain hazard when lifting heavy wood onto the saw table, or a breathing hazard when sanding wood.

Discuss some of the control measures that have been implemented to protect workers from the identified hazards. Employees should work with management and the safety committee in developing formal written Job Hazard Assessments. These are great training tools for new employees when discussing accident prevention.



### *Safety Habits*

Accident prevention takes practice. Eventually accident prevention and safe work practices will become a habit. Some good habits to practice include:

- Cleaning up slip and trip hazards
- Complimenting others who work safely
- Eliminating risks before you start work
- Following safe work practices—not taking shortcuts
- Helping others, especially new employees, understand the concepts of accident prevention
- Inspecting equipment and machinery before each use
- Keeping emergency exits and equipment accessible
- Keeping your mind focused on your job and the associated hazards
- Knowing and following all company safety rules
- Knowing the hazards of chemicals you work with as well as signs and symptoms of overexposure
- Looking for things that could go wrong
- Maintaining good housekeeping in your work area
- Maintaining healthful habits such as eating nutritious foods, getting adequate sleep, reducing consumption of alcohol, exercising regularly, and managing stress
- Not ignoring safety hazards and assuming someone else will take care of the hazard
- Not opening electrical panels unless you are a trained electrician
- Not tolerating horseplay
- Recognizing risks associated with doing your job
- Removing ignition hazards
- Speaking up when unsafe conditions or behaviors are observed
- Using material-handling aids when lifting heavy or large objects
- Using safe lifting techniques
- Volunteering to be involved with safety training and the Safety Committee
- Wearing the correct PPE when required and also for added protection when not actually required

Discuss other safety habits that are important in your workplace

### *Near Miss and First-Aid Incidents*

Employees who report near miss and first-aid incidents can also help prevent accidents. Near miss incidents are often described as accidents that nearly happened. Some examples might include the following:

A worker is almost struck by a forklift; an object falls off of a high storage rack and lands near a worker, a worker slips and falls without being injured. Each of these incidents is a potential real accident or injury just waiting to happen. Near misses should be treated like warnings. The company has been warned that a hazard exists and has a chance to correct the situation before someone is really injured.

First-aid incidents are small injuries such as minor cuts, bruises, or burns. These incidents could have been much more serious. Like near misses, a minor first-aid incident is a warning that something needs to be changed or a real, more serious, injury could occur.

Take corrective actions to prevent a near miss or first-aid incident from becoming a serious injury or illness. Discuss how employees can report near miss and first-aid incidents in your workplace.



### *Protection against Hazards*

Once the hazards of the workplace and the hazards of work practices have been identified, the company needs to take steps to eliminate, reduce, or control the hazards in order to prevent injuries or illnesses.

There are three basic ways to control a workplace hazard.

### *Engineering Controls*

Engineering controls reduce or eliminate hazards by making changes to machinery, equipment, workspace layout, etc. Engineering controls, when feasible, are often the most effective way to control a hazard.

Engineering controls require planning, money, and time before they can be implemented.

Examples of engineering controls might include adding a perimeter guard around a machine, changing the height of a work bench, adding a conveyor to reduce material handling, designing new and different tools, adding ventilation to reduce exposure to chemical fumes, etc.

Discuss examples of engineering controls that have been implemented in your workplace.

### *Administrative Controls*

Administrative controls reduce or eliminate hazards through changes in work practices and procedures.

Requiring employees to team-lift heavy or awkward objects instead of lifting the object by themselves is an example of a changed work practice. Another is having employees conduct a walk-through of their work area before each shift and correct any hazards. Two more are rotating employees to minimize exposure to chemicals or shortening time spent in jobs with repetitive motion, etc.

Discuss examples of administrative controls that have been implemented in your workplace.

### *Personal Protective Equipment (PPE)*

Personal protective equipment is the final option in controlling workplace hazards. When engineering controls and administrative controls are not feasible, PPE should be implemented.

Examples include work gloves worn to protect against abrasions and cuts when handling metal materials, work shoes with good soles to protect against slips and falls, and respirators to protect against breathing chemicals.

### Suggested Discussion Questions

- Are there any other questions?
- Describe one of the methods used to control workplace hazards?
- Describe some ways that employees can be involved in accident prevention.
- How can participating in a safety meeting contribute to accident prevention?
- Name some safety rules that you think really help prevent accidents.
- What are some accident prevention functions of the safety committee?
- What are the three steps involved with developing a Job Hazard Assessment?
- What does OSHA's General Duty Clause have to do with accident prevention?
- Why is employee involvement so important in preventing accidents?
- Why is it important to report near miss incidents?

### *Wrap-Up*

Accident prevention requires constant diligence on the part of both management and employees. Employee participation is crucial to the success of accident prevention programs. Employees have input that is too valuable to ignore.



If you want to make your workplace safer, get involved with the safety committee, make safety suggestions, participate in safety meetings, report near miss and first-aid incidents, inspect your machinery, evaluate the workplace for hazards, and check your job steps for exposure to hazards.

Take ownership of the safety in your work area.

### **Sample Handout # 1 -- General Duty Clause**

“Each employer shall furnish to each of his employees employment and a place of employment which is free from recognized hazards that are causing or likely to cause death or serious physical harm to his employees.”

The General Duty Clause requires employers to go beyond the requirements of specific OSHA regulations to seek out and control hazards that are not addressed in a specific OSHA regulation.

### **Sample Handout # 2 -- Safety Committee**

**Safety Suggestions**—The safety committee may be required to evaluate the safety suggestions provided by other employees. Employees participating on the committee have a say in whether or not a safety suggestion is implemented.

**Corrective Actions**—The safety committee may be charged with following up on corrective actions to make sure they have been implemented in a timely manner. Participating employees have the chance to keep management accountable for correcting unsafe conditions in order to prevent potential injuries and illnesses.

**Accident Investigations**—The safety committee may be charged with evaluating accident investigations and looking for ways to prevent that accident from happening again. Employees can provide valuable insight on how the accident occurred and what steps led up to the accident as well as what steps to take in order to prevent the accident from reoccurring.

**Safety and Health Programs**—The safety committee may be required to develop, or at least review, written safety and health programs. Employee participation is important in making sure the written programs reflect actual working conditions, can be implemented effectively, and will actually make an impact and improve workplace safety.

**Safe Work Practices**—The safety committee may be required to develop, or at least review, safe work practices. The employees participating on the safety committee will know if the safe work practices can be implemented as described and if they will prevent workplace injuries and illnesses.

### **Sample Handout # 3 -- Evaluate Work Practices**

Break down each job that you do into component tasks or steps.

For example, component tasks for someone who works in a cabinet-making shop might include selecting wood, putting wood on the table saw, cutting wood, sanding wood, etc.

Identify all the potential hazards of each task and each job step. Look for unsafe work practices or habits.





For example, the cabinet maker might have hazards such as wood splinters when selecting wood, a sharp saw blade and flying dust when cutting wood, a back strain hazard when lifting heavy wood onto the saw table, or a breathing hazard when sanding wood.

For each hazard identified, determine how to control the hazards in order to prevent injury.

Controls for the cabinet maker might include wearing gloves, using a tool to push wood through the blade, wearing safety glasses, or installing a dust collection system.

### Sample Handout # 4 -- Safe Habits

- Clean up slip and trip hazards.
- Compliment others who work safely.
- Do not open electrical panels unless you are a trained electrician.
- Do not tolerate horseplay.
- Don't ignore safety hazards and assume someone else will take care of the hazard.
- Eliminate risks before you start work.
- Follow safe work practices—do not take shortcuts.
- Help others, especially new employees; understand the concepts of accident prevention.
- Inspect equipment and machinery before each use.
- Keep emergency exits and equipment accessible.
- Keep your mind focused on your job and the associated hazards.
- Know and follow all company safety rules.
- Know the hazards of chemicals you work with as well as signs and symptoms of overexposure.
- Look for things that could go wrong.
- Maintain good housekeeping in your work area.
- Maintain healthful habits such as eating nutritious foods, getting adequate sleep, reducing consumption of alcohol, exercising regularly, and managing stress.
- Recognize risks associated with doing your job.
- Remove ignition hazards.
- Speak up when unsafe conditions or behaviors are observed.
- Use material-handling aids when lifting heavy or large objects.
- Use safe lifting techniques.
- Volunteer to be involved with safety training and the safety committee.
- Wear the correct PPE when required and voluntarily for added protection.

