



BIE SAFETY ADVISOR

Importance of Effective Injury and Illness Prevention Programs

Workplace fatalities, injuries, and illnesses cost the country billions of dollars every year. In its 2016 Workplace Safety Index, Liberty Mutual estimated that employers paid more than \$1 billion per week for direct workers' compensation costs for the most disabling workplace injuries and illnesses in 2013. Employers that implement effective safety and health management systems may expect to significantly reduce injuries and illnesses and reduce the costs associated with these injuries and illnesses, including workers' compensation payments, medical expenses, and lost productivity. In addition, employers often find that process and other changes made to improve workplace safety and health may result in significant improvements to their organization's productivity and profitability.

OSHA has recently updated its Recommended Practices for Safety and Health Programs in Construction and can be found at: https://www.osha.gov/shpguidelines/docs/8524_OSHA_Construction_Guidelines_R4.pdf. These guidelines address many of the aspects of effective injury and illness programs specific to the construction industry.

You can help prevent workplace injuries and illnesses by looking at your workplace operations, establishing proper job procedures, and ensuring that all employees are trained properly.

One of the best ways to determine and establish proper work procedures is to conduct a job hazard analysis. A job hazard analysis is one component of the larger commitment of a safety and health management system.

There is great value in the job hazard analysis. Supervisors can use the findings of a job hazard analysis to eliminate and prevent hazards in their workplaces. This is likely to result in fewer worker injuries and illnesses; safer, more effective work methods; reduced workers' compensation costs; and increased worker productivity. The analysis also can be a valuable tool for training new employees in the steps required to perform their jobs safely.

For a job hazard analysis to be effective, management must demonstrate its commitment to safety and health and follow through to correct any uncontrolled hazards identified.

Job hazard analysis can be conducted on many jobs in your workplace. Priority should go to the following types of jobs:

- Jobs with the highest injury or illness rates;
- Jobs with the potential to cause severe or disabling injuries or illness, even if there is no history of previous accidents;
- Jobs in which one simple human error could lead to a severe accident or injury;
- Jobs that are new to your operation or have undergone changes in processes and procedures;
- Jobs complex enough to require written instructions.

Where To Begin

#1- Involve your employees. It is very important to involve your employees in the hazard analysis process. Involving employees will help minimize oversights, ensure a quality analysis, and get workers to "buy in" to the solutions because they will share ownership in their safety and health program.

#2-Review your accident history. These events are indicators that the existing hazard controls (if any) may not be adequate and deserve more scrutiny.

#3-Conduct a preliminary job review. Discuss with your employees the hazards they know exist in their current work and surroundings. Brainstorm with them for ideas to eliminate or control those hazards.

#4-List, rank, and set priorities for hazardous jobs. List jobs with hazards that present unacceptable risks, based on those most likely to occur and with the most severe consequences. These jobs should be your first priority for analysis.

#5- Outline the steps or tasks.

Detailed information on Job Hazard Analysis can be found at:

<https://www.osha.gov/Publications/osh3071.html>



PPE Hazard Assessment

The Occupational Safety and Health Administration (OSHA) requires that employers protect their employees from workplace hazards that can cause injury. When engineering controls and safe work practices are not feasible or do not provide sufficient protection, employers must provide personal protective equipment (PPE) to their employees and ensure its use.

PPE Assessment

In order to determine what types of PPE are necessary, supervisors must first identify physical and health hazards in the workplace. This process is known as conducting a PPE Assessment. The PPE Assessment process must be documented using the PPE Assessment form. PPE Assessments should include the following:

- A walkthrough of the workplace to develop a list of potential hazards
- Identification of all physical, biological, chemical, and radioactive hazards
- A review of any history of occupational illnesses or injuries
- Identification of the appropriate required PPE for the hazard/task

Responsibilities

Supervisors:

- Conduct a PPE Assessment for each job position or title under their direction
- Ensure that PPE is provided to employees and that it is used properly

Employees:

- Must utilize the provided PPE in accordance with the instruction and training provided
- Employees must inspect their PPE, properly care for and store their PPE, and attend PPE training

Required PPE

- Safety Glasses, Goggles, or Face Shields –are required if employees are exposed to hazards such as flying particles, chemical splash and vapor, infectious materials, and harmful light radiation.
- Protective Gloves - shall be used to protect the hands against skin absorption of harmful substances, chemical burns, electrical hazards, abrasions, cuts, and punctures.
- Hard Hats – are required when there are overhead hazards, electrical hazards, or there is the potential to bump the head against fixed objects.
- Safety Shoes – are required when the feet are potentially exposed to crushing, puncture, electrical, and slip hazards.
- Electrical PPE – is required when employees are potentially exposed to live electrical conductors.
- Respirators –are required when respiratory hazards cannot be safely controlled with engineering or work practice controls.
- Ear Plugs & Ear Muffs – are required when employees are exposed to hazardous noise - >90 dB(A) 8 hour time weighted average

*Note: Employees should check with their supervisor concerning site specific procedures and policies pertaining to PPE.

Selecting PPE

- When selecting PPE, fit and comfort should be taken into consideration
- Most PPE comes in a variety of sizes and care should be taken to select the proper size for each employee
- Improperly fitted PPE may not provide the level of protection desired and may discourage employee use
- OSHA requires that many categories of PPE meet or be equivalent to standards developed by the American National Standards Institute (ANSI) and the National Institute for Occupational Safety and Health (NIOSH).

PPE Training

Employees who are required to use PPE must be trained in its use. PPE training will cover when PPE is necessary, PPE donning and doffing, limitations, inspection, and maintenance of PPE.

