

Job Hazard Analysis (JHA)

A job hazard analysis is not a complicated or time-consuming procedure. In fact, many jobs most likely have already undergone an informal hazard analysis. When changes have been made in a job procedure intended to prevent an accident, an informal job hazard analysis must be done. A formal job hazard analysis is a procedure designed to study the job for any hazards caused by the machine, surroundings, or the worker. Its purpose is to eliminate or control all hazards that can be caused by unsafe actions of the worker and the unsafe conditions of the environment.

Benefits of a JHA

- It will establish the safe job procedures necessary to prevent or control potential major accidents associated with each job step.
- 2. It will identify unsafe conditions that can be eliminated or at least controlled.
- 3. It will be a useful training tool for new employees and a refresher of needed skills for the experienced employee.
- Through their involvement in developing JHA's, employees will become actively involved in the safety program.

Selecting the Job

To obtain the greatest benefits in the shortest time, the following guidelines should be used to determine the order in which the jobs will be analyzed. The jobs that are to be analyzed should first include the following:

- 1. Jobs that are producing the highest number of accidents.
- 2. Jobs that have experienced disabling injuries.
- 3. Jobs where the potential for serious injury exists.
- 4. New jobs (analysis should not be done only after an accident has occurred).

Doing a JHA - Four Basic Steps

The first is to define the job. This is a short explanation about the job and should not be too complex. However, enough detail should be provided to identify the job properly and differentiate it from other jobs.

The second is to break the job into a sequence of steps, each describing what is being done. This procedure requires the assistance of a safe, experienced worker. Care must be taken not to be too

detailed. Each step should tell what is being done, not how it is done. When recording the step, begin with action words like "remove", "carry", or "open", and end by identifying to what the action was applied. For example, "remove the die", "carry to bench", etc. After observing and recording the steps, the observed employee should verify all steps and explain any deviations that may occur. The deviations that occur irregularly could lead to an accident.

The third step is to identify the hazards and determine what can go wrong and result in an accident. Question each step. Can the employee be struck by a moving object, strike against a stationary object, get caught in moving equipment, slip or fall, strain themselves, or be exposed to a toxic substance or excessive noise performing the task? After documenting the possible sources of accidents, the observed employee should review the analysis and provide any final thoughts or suggestions.

The final step is to develop a recommended safe job procedure that eliminates or controls hazardous conditions or operations. The principal solutions are as follows:

- 1. Finding a new way to do the job.
- 2. Changing the physical condition that creates the hazard.
- 3. Providing additional personal protective equipment to the employee.
- 4. Providing additional training to the employee.

Again, the ideas of the observed employee should be sought. His experience with "near misses" and time spent on the job will enable them to make practical suggestions. The employee's involvement will also improve employee acceptance when the new procedures are implemented.

Although a JHA will be good as long as there are no changes to a job, all JHA's should be reviewed periodically to make sure that changes have not been inserted by employees or supervisors. Naturally, when any changes in the equipment, facilities or operations occur, affected JHA's should be reviewed. Also, when accidents occur on jobs that have been analyzed, the causes of the accidents should be checked against the JHA's to make sure that controls have been established to handle the causes.

The JHA is a valuable training, refresher, and employee involvement aid. It is one that will pay big dividends to the loss control program.

