Instructions for Completing a Job Hazard Analysis

Introduction
University Policy 7-40 Personal Protective Equipment (PPE) requires departments to complete a Job Hazard Analysis (JHA) for all job related duties performed to determine personal protective equipment requirements. This document gives a brief discussion of the job hazard analysis process.

A job hazard analysis examines each basic step in a job task, identifies the potential hazards and determines measures to protect workers from these hazards. The job hazard analysis process has been implemented at the University to help prevent accidents and injuries by identifying job hazards and either removing them or providing appropriate protective equipment.

An analysis is accomplished by first listing all the steps required to complete a particular job. These steps must be listed on the job hazard analysis form found at the end of this document. Secondly, each step is evaluated for potential hazards. The "Hazard Identification" column is used to assign the hazards associated with the job step listed under "Job Description". Lastly, record the precautions required for completing the task safely for each step listed using the "Required Precautions" column. Be specific in your comments. Remember the best option is to engineer out the hazardous element when possible, for instance, substituting a toxic chemical with a less toxic formulation. Be specific about the personal protective equipment when it is required, do not use general statements.

Depending on your department's policy, circulate the job hazard analysis to the individuals listed for their review and approval. Train the individuals assigned to perform the listed duties using the job hazard analysis form. Discuss the information in the three columns and emphasize the required personal protective equipment. The individuals must be trained in the proper use of personal protective equipment required by the JHA. Document this training using a Right-to-Know training certificate. Finally, communicate to the employee that the "Required Precautions" are mandatory and that failure to follow these precautions may result in disciplinary action.

Basic Steps
A job hazard analysis is broken down into 6 major steps:

1. Select the job task to be analyzed.
Prioritize which job tasks to analyze. Job tasks that have had accidents and/or injuries should be analyzed first as well as ones with a potential for serious injury. If a new process requires the development of new procedures and job tasks it should be analyzed for hazards before implementation and reviewed again after implementation.

2. Identify the major sequence of steps for each task (Job Description).
Once a job task has been chosen for analysis, it must be broken down into logical steps. Limit the number of steps in a JHA to a manageable number. Most jobs can be described in ten or less steps. The job steps must be kept in their proper sequence to ensure a proper analysis. The opportunity to make recommendations will come later in the analysis.

3. Identify the potential hazards for each step (Hazard Identification).
Once the job steps have been chosen, the potential hazards for each step can be identified. Assume whatever can go wrong may go wrong! What are the potential hazards as a result of each task step? Will anyone be exposed to hazardous chemicals? Is there poor workstation design? There may only be one, or there may be a large number of actual or potential hazards for each job step.
Try to identify all hazards associated with the task. The job hazard analysis preparer should observe the task being performed prior to evaluation. Videos can be made of the job task and be studied by a group. Consider environmental as well as task-oriented hazards. Answer questions such as:

- Is there a fall, trip or slip hazard?
- Is there a struck against or stepped on hazard?
- Is there a struck by hazard?
- Can anyone get caught in, under or between?
- Is there a chance of a rub or abrade to any part of their body?
- Is there a potential for overexertion?
- Will they be working near or around moving vehicles?
- Examine the environment: are there sources of heat radiation, electric current, or toxic, caustic or noxious substances?

4. Determine preventative measures to protect against the hazards (Required Precautions).

The most important aspect of the job hazard analysis is to determine preventive measures to control or eliminate the identified hazards. If you have questions or concerns during the process, EHS is available to assist you. Consider what actions must be taken to control or eliminate the hazard. Refer to the first two columns of the work sheet and decide what actions are needed to eliminate the hazard or protect the employee. Consider using safety devices when possible. Describe specifically what needs to be done using action words. List the required personal protective equipment for each step. Remember to revise the job hazard analysis whenever the task is modified. Options for preventative measures include:

- Eliminate the Hazard
  - Substitute a less hazardous substance/material

- Contain/Enclose the Hazard
  - Use exhaust ventilation
  - Provide appropriate shielding or guarding
  - Remove operator from the area of the hazard

- Revise Work Procedures
  - Add additional steps
  - Use mechanical aids (using grabbers to pick up fallen objects rather than bending over frequently)

- Reduce Worker Exposure - This is the least effective option in most cases, but may have to be used when permanent work process change is impossible or impracticable.
  - Job rotation - worker exposure is reduced
  - Provision of personal protective equipment (PPE) to workers

5. Develop a worker-training program

Reformat the job hazard analysis into a training program to help the employee eliminate or reduce hazards.

6. Reevaluation

Reevaluate the job descriptions and modify the job hazard analyses accordingly.
<table>
<thead>
<tr>
<th>Job Description</th>
<th>Hazard Identification</th>
<th>Required Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>List steps required to perform the task in the sequence they are carried out</td>
<td>List the potential risk/hazard that could cause injury or damage when task step is performed</td>
<td>For each hazard identified list the control measures required to eliminate or minimize the risk of injury</td>
</tr>
</tbody>
</table>