Job Hazard Analysis

A Job Hazard Analysis is an important tool for identifying and reducing hazards in any industry.

What is a JHA?
A JHA, also called a job safety analysis, is a technique to identify the dangers of specific tasks in order to reduce the risk of injury to workers.

Why is a JHA important?
Once you know what the hazards are, you can reduce or eliminate them before anyone gets hurt. The JHA can also be used to investigate accidents and to train workers how to do their jobs safely. It will take a little time to do your JHAs, but it’s time well spent. Be sure to involve employees in the process – they do the work and often know the best ways to work safer.

Instructions for Conducting a JHA

How do I start?

1. Involve employees.
   - Discuss what you are going to do and why
   - Explain that you are studying the task, not employee performance
   - Involve the employees in the entire process

2. Review your company’s accident/injury/illness/near miss history to determine which jobs pose the highest risk to employees.

3. Identify the OSHA standards that apply to your jobs. Incorporate their requirements into your JHA.

4. Set priorities.
   - You may want to give priority to jobs that have:
     - High injury or illness rates
     - Close calls, where an incident occurred but no one got hurt
     - Identified violations of OSHA standards
     - The potential to cause serious injuries or illness, even if there is no history of such problems
     - The potential where simple human mistake could lead to severe injury
     - New operations or have been changed
     - Required written instructions
How do I do it?

1. Break the job task into steps.

   - Watch the worker do the job and list each step in order
   - Begin each step with a verb, for example, "Turn on the saw"
   - Do not make it too broad or too detailed
   - You may want to photograph or videotape
   - Review the steps with the worker and other workers who do the same job to make sure you have not left anything out.

Example:

<table>
<thead>
<tr>
<th>TASK</th>
<th>HAZARDS</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reach into box to the right of the machine, grasp casting and carry to wheel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Push casting against wheel to grind off burr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Place finished casting in box to the left of the machine.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Identify the hazards of each step. For each hazard ask:

   - What can go wrong?
   - What are the consequences?
   - How could it happen?
   - What are other contributing factors?
   - How likely is it that the hazard will occur?
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<tbody>
<tr>
<td>1. Reach into box to the right of the machine, grasp casting and carry to wheel</td>
<td>Strike hand on edge of metal box or casting; cut hand on burr. Drop casting on toes.</td>
<td></td>
</tr>
<tr>
<td>2. Push casting against wheel to grind off burr.</td>
<td>Strike hand against wheel, sparks in eyes. Wheel breakage, dust, sleeves get caught</td>
<td></td>
</tr>
<tr>
<td>3. Place finished casting in box to the left of the machine.</td>
<td>Strike hand against metal box or casting</td>
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3. **Review the list of hazards with employees who do the job. Discuss what could eliminate or reduce them.**

4. **Identify ways to eliminate or reduce the hazards.**

   - Safer way to do the job
   - Describe each step
   - Be specific - don’t use generalizations like, "Be Careful"
   - Changes in equipment
   - Equipment changes, or engineering controls, are the first choice because they can eliminate the hazard
     - E.g. machine guards, improved lighting, better ventilation
   - Changes in work processes
   - Administrative controls, or changes in how the task is done, can be used if engineering controls aren’t possible
     - E.g. rotating jobs, changing the steps, training
   - Changes in personal protective equipment
   - When engineering and administrative controls aren’t possible or don’t adequately protect the workers, use personal protective equipment
     - E.g. gloves, hearing protection
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<td>1. Reach into box to the right of the machine, grasp casting and carry to wheel</td>
<td>Strike hand on edge of metal box or casting; cut hand on burr. Drop casting on toes.</td>
<td>Provide gloves and safety shoes.</td>
</tr>
<tr>
<td>2. Push casting against wheel to grind off burr.</td>
<td>Strike hand against wheel, sparks in eyes. Wheel breakage, dust, sleeves get caught</td>
<td>Provide larger guard over wheel. Install exhaust system. Install exhaust system. Provide safety goggles. Instruct employee to wear short sleeved shirts.</td>
</tr>
<tr>
<td>3. Place finished casting in box to the left of the machine.</td>
<td>Strike hand against metal box or casting</td>
<td>Provide tool for removal of completed stock.</td>
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What do I do next?

1. **Correct the unsafe conditions and processes.**
   - Train all employees who do the job on the changes
   - Make sure they understand the changes

2. **Review JHAs:**
   - Periodically - you may find hazards you missed before
   - When the task or process is changed
   - When injuries or close calls occur

3. **Use JHAs with:**
   - Training
   - Accident investigation