How to Conduct a Job Hazard Analysis

What's at Stake?

A job hazard analysis (JHA), sometimes called a job safety analysis (JSA), is a systematic method for identifying and evaluating hazards associated with a job or task. It's based on the idea that any job can be separated into simple steps, potential hazards associated with those steps can be identified, and solutions can be developed to control those hazards.

A JSA not only helps to identify hazards but is an excellent training tool. It is almost like a how-to guide for you and your co-workers because it lists the steps and safety measures for each step of a job. It is also useful because it lists the equipment and supplies needed to do the job.

You may believe that conducting a JHA is a task best left to your supervisor, but you have an important role to play. Your experience in doing a job gives you unique knowledge of what can go wrong from a safety and health standpoint. Some hazards might be obvious, but you probably encounter situations that haven't been considered by others. If you keep that knowledge to yourself, someone else might discover the hazard the hard way.

What's the Danger?

Consider this example…

A 40-year-old male died from injuries sustained when he fell off a ladder. He was part of a crew shoveling snow from a building roof overhang. The ladder being used to access the roof did not have safety feet.

The victim climbed the ladder to the roof, while a coworker stabilized the ladder below. As he readied to step off, the ladder started to slide, and the victim's feet became entangled between the rungs.

He fell to the icy surface below, landing on his back. He later died from his injuries. The investigators reported that the potential for injury using a ladder without safety feet might have been uncovered in a job hazard analysis.

How to Protect Yourself

Look to your employer's policies for information on the JHA process:

- Are they done?
- How to request one be done on your job/task.

- How often are they done/reviewed?
- How to be a part of the JHA team, etc.

A JHA is typically done by a team made up of management and employees. Employees should be asked to participate because of their knowledge and experience performing a task. It’s likely the team will include members of the safety committee too if one is established.

Once the jobs and tasks for review are identified a JHA the next step. Here’s the three-step process of how one is done.

Step 1 Break it Down

First, break the job or task down into basic steps. No step in the process is too small when developing a JHA. While an employee performs the task a JHA team member, or members, observe and note what they are seeing, using words describing actions such as “lift the load” or “rinse the bucket.”

- You want to avoid the steps being too broad or too detailed.
    - Too much detail will make the JHA tedious and likely to be ignored.
    - Too little detail could omit hazards.
    - A good rule of thumb is to focus on key steps and keep the number to about 10.
- Focus on the action of each step and describing that action.
    - Think of it as telling a story of the work.
    - Keep in mind, an action can be done but also something that is not done.

Step 2 ID Hazards

Once the steps have been documented the focus turns to identifying the hazard or hazards associated with each step. You want to uncover:

- What could go wrong?
- How could it happen?
- What are the consequences if it does happen?
- What are the contributing factors of the hazards?
- What is the probability and severity of it happening?

Step 3 Prevention

The JHA is almost complete. The last step is to identify ways to correct or prevent each hazard.

- Often referred to as engineering controls, the safest and most effective way to prevent and correct a hazard is to find a way to eliminate or reduce it. For example:
    - Substituting a less hazardous chemical.
    - Removing the source of excessive noise or temperature.
- If a hazard cannot be eliminated, then try to reduce the level of exposure. For example:
    - Enclosing and ventilating a process that produces a lot of dust and fumes.
    - Installing guards or barriers to prevent or restrict access.
    - Wearing PPE.

Final Word

Your input into safety issues is essential. Find out how you can participate in the JHA process.