

Job Hazard Analysis (JHA)

A JHA, also called a job safety analysis (JSA), is a process by which we identify the potential **hazards** for each step a person takes to perform a task and the **controls** we can use to eliminate or reduce **risk** and prevent **incidents**.

JHAs answer important questions like:

- What could go wrong?
- How could an incident happen?
- How likely is an incident?
- What are the consequences of the incident?
- How can we eliminate hazards or reduce risk to an acceptable level?

A JHA can help you:

- Implement effective safety controls
- Create and update safe work procedures
- Standardize best practices
- Develop valuable training
- Comply with applicable regulations
- Raise safety and health awareness

The result is a safer work environment with fewer injuries and illnesses, more effective work practices and increased productivity.

JHA Process

Exact JHA processes may vary, but they generally involve four steps:

1. Select and prioritize the jobs or tasks to analyze.
2. Break each job or task into a sequence of detailed steps.
3. Analyze each step and identify the potential hazards.
4. Determine which controls will eliminate or reduce risk to an acceptable level.

One person may lead the JHA, but many people should provide input. **Experienced workers** care about safety and can offer insight about past incidents and near misses. **New workers** offer a fresh perspective and may notice hazards that experienced workers may miss. Workers who perform **similar tasks** or the same tasks in a different setting may share information about their hazards and controls. Health and safety professionals, supervisors and other **leaders** are often responsible for implementing controls and may offer specialized information.

Step 1: Select and Prioritize Tasks to Analyze

- Review records and reports about previous incidents, near misses and concerns
- Talk to workers
- Look for new or newly changed processes
- Prioritize tasks according to their risk

Step 2: Break Tasks into Steps

- Use verbs that describe what workers are doing to start each step
- Consider breaking long lists of steps into groups and doing a JHA for each group
- Review and revise steps with experienced workers

If you omit a basic step, you may miss a hazard or control later in the process. You may determine the steps that are part of a job or task by reviewing documented work procedures and using discussions and observations.

When you discuss steps or observe people, remember to:

- Use safe practices and stay aware of your surroundings
- Avoid causing distractions or hazards
- Introduce yourself
- Let them know your purpose
- Ask if they are comfortable talking to you or being observed
- Follow your company's policies if you are recording people
- Ask workers to work safely and slowly and describe what they are doing, if possible
- Correct any safety issues that put people in danger
- Share what you learn

Step 3: Analyze Steps and Identify Hazards

- Can body parts get caught in or between objects?
- Does housekeeping contribute to slips, trips or falls?
- Could lifting, pushing or pulling tasks cause sprains or strains?
- Is noise or vibration a problem?
- Is lighting sufficient?
- Does the step involve hot, toxic or caustic substances?

Clearly and concisely document each hazard for the corresponding task step. Review the hazards you identify with the people you observed or talked to about the steps.

Step 4: Determine Controls to Reduce Risk

- Clearly and concisely document the controls for each hazard
- Get input from others
- Make sure controls don't introduce new hazards

The hierarchy of controls lists controls in order of their effectiveness. For the best results, use a combination of controls.

1. Eliminate risk by redesigning the process
2. Substitute with a safer process or product
3. Provide engineering controls at the source
4. Reduce exposure through administration
5. Use personal protective equipment (PPE) as a final barrier between people and hazards

After the JHA

Implement controls. Communicate your needs clearly and identify completion dates or deadlines. Follow up with the people who helped you complete the JHA so that they know that their input was valuable. Use the hazards and controls in your JHA as topics for upcoming safety newsletters and safety meetings to raise awareness about safety and health issues. Confirm that the controls are working as expected and haven't introduced any new, unexpected hazards.

Update the JHA or create a new one when equipment, materials, processes or the environment change. Schedule regular reviews and updates for JHAs, such as annually. Review the JHA after an incident, such as an injury or a near-miss.