

Job Hazard Analysis (JHA) Overview

What is a Job Hazard Analysis (JHA)?

- A JHA is a method for identifying and evaluating hazards associated with tasks (steps) with a specific job or activity and eliminating or mitigating them prior to starting work.

Why conduct a JHA?

- A JHA can prevent work-related injuries or illnesses by eliminating or controlling identified hazards. It is a means to ensure that workers have the training, equipment, and supplies to do their jobs safely.

Who should conduct a JHA?

- Individuals who perform the tasks that are being evaluated. Supervisors shall review the JHA with their employees prior to starting job.

Procedure for Completing a Job Hazard Analysis

1. Job or Task Description: Define the job or activity.	
2. Sequence of Job Tasks: Break down the job or activity into tasks (steps). A single task can be the combination of minor actions.	
3. Hazards and Consequences: <u>For each task</u> identify all of the hazards and consequences that could occur. Think about the inherent hazards of the material, equipment or activity; what could go wrong (failures and/or modes of failure); what is worst-case consequence.	
<ul style="list-style-type: none"> <input type="checkbox"/> Ladder work - severe injury, fatal fall <input type="checkbox"/> Poor housekeeping – congestion; slip, trip, or fall; injuries <input type="checkbox"/> Machinery – moving parts; amputation <input type="checkbox"/> Flammable Liquids – vapors; fire/explosion <input type="checkbox"/> Hazardous materials - uncontrolled spill/release <input type="checkbox"/> Noise - hearing loss <input type="checkbox"/> Electricity - shock and/or arc flash <input type="checkbox"/> Dusts, fumes, mists, or vapors in air - inhalation <input type="checkbox"/> Oxygen displacement - asphyxiation <input type="checkbox"/> Confined space - hazardous atmosphere; engulfment; fatality <input type="checkbox"/> Portable tools – projectiles; eye injury <input type="checkbox"/> Contact with hot, toxic, or caustic chemical/product - burn, injury 	<ul style="list-style-type: none"> <input type="checkbox"/> Biological exposure - infection <input type="checkbox"/> Repetitive tasks - Musculoskeletal Disorder (MSD) injury <input type="checkbox"/> Strain from lifting, pushing, or pulling - MSD injury <input type="checkbox"/> Working in awkward position - MSD injury <input type="checkbox"/> Lighting problem - seizures, headache <input type="checkbox"/> Falling object – struck by; injury <input type="checkbox"/> Radiation - exposure <input type="checkbox"/> Weather conditions affect safety <input type="checkbox"/> Thermal – cold/heat - burn, dehydration <input type="checkbox"/> Other <input type="checkbox"/> Other <input type="checkbox"/> Other

4. Controls (Prevention Measures): Identify existing controls to eliminate or mitigate the potential hazard/consequence scenario. If the consequence is severe, try to use inherently safe controls or engineering controls and multiple controls to mitigate the risk. Some controls can help prevent the likelihood of the accident scenario by preventing the occurrence or reducing the severity of the consequence.

Inherent Safety

- Elimination
- Substitution
- Process changes (reduce volume, changing operating parameters, etc.)

Engineering

- Secondary containment (berms, vaults)
- Install guards on machine moving parts
- Use scaffold or lift instead of ladder
- Ventilate the area
- Detection and alarm systems (interlocks and notification)
- Use platform ladder instead of regular step ladder
- Guardrails (permanent or temporary)
- Emergency showers/eyewash
- Pressure relief
- Isolate the area (barriers)
- Insulate noisy equipment
- Fire protection - sprinklers and alarm
- Fire extinguisher
- Other

Safe Work Practices and Administrative

- Safe work practices
- Standard Operating Procedures (SOP)
- JHAs
- Work permits (LOTO, CSE)
- Use tool lanyards at heights
- Reduce exposure time
- Training
- Spill kits
- Emergency response team
- Exposure control plan
- Other

Personal Protective Equipment (PPE)

- Safety glasses/goggles/face shield
- Gloves (specify type)
- Skin protection (lab coat/Tyvek suit)
- Respiratory protection
- Personal fall protection equipment
- Hearing protection
- Hard hat
- Impact/radiation shielding
- Other

5. Use JHA template form to complete the JHA: In addition to listing the hazards/consequences and controls for each job step, list the required training and PPE.