

## How to Complete a Job Hazard Analysis

A Job Hazard Analysis (JHA), also called a job safety analysis (JSA) is a technique which helps integrate accepted safety and health principles and practices into a particular task or job operation to reduce the hazards and risk of injury to workers. In a JHA, each step of the job is evaluated to identify potential hazards and the controls necessary to mitigate those hazards. The terms "job" and "task" are commonly used interchangeably to mean a specific work assignment, such as "operating a hand truck" or "applying pesticides".

A supervisor and/or staff who actually perform a particular task should develop the JHA. Supervisors or their designee should review and maintain the JHA.

### Instructions for Conducting a Job Hazard Analysis

1. **Involve personnel involved in performing the activity or experimentation.**
  - 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. **Identify university and regulatory requirements that apply to your tasks. Incorporate those requirements into your JHA. This may include PPE, engineering controls, administrative controls, etc.**
3. **Set priorities.**
  - Tasks using high hazard chemicals, biologicals, radioactive materials or high hazard equipment.
  - Tasks where there have been "close calls" - where an incident occurred but no one got hurt;
  - Tasks with the potential to cause serious injuries or illness, even if there is no history of such problems;
  - Tasks in which one simple human mistake could lead to severe injury;
  - Tasks that are new to your experimentation or have been changed; and
  - Tasks complex enough to require written instructions.
4. **Identify workplace hazards.**
  - A job hazard analysis includes identifying the hazards:
    - What hazardous materials are you working with (chemical, biological, radioactive)?
    - What physical hazards are you working with (electrical, thermal, height, etc.)?
    - What can go wrong?
    - What are the consequences?
    - How could it arise?
    - What are other contributing factors?
    - How likely is it that the hazard will occur?
5. **Identify hazard control measures.**

- Hazard control measures recommended in the analysis must be incorporated into the tasks. Not all hazard controls are equal. Some are more effective than others at reducing the risk.
- Engineering controls
  - Elimination/minimization of the hazard
  - Substituting processes, equipment, materials
  - Enclosure of the hazard using enclosed cabs, enclosures for noisy equipment, or other means
  - Isolation of the hazard with interlocks, machine guards, blast shields, welding curtains, or other means
  - Removal or redirection of the hazard such as with local and exhaust ventilation.
- Administrative controls
  - Written operating procedures, work permits, and safe work practices
  - Exposure time limitations (used most commonly to control temperature extremes and ergonomic hazards)
  - Monitoring the use of highly hazardous materials
  - Alarms, signs, and warnings
  - Buddy system
  - Training
- Personal protective equipment
  - Safety Glasses
  - Hearing Protection
  - FR Lab Coats
  - Face Shields

## **6. Training**

- Ensure that affected personnel have reviewed the JHA and understand the hazards and the controls that are required.
- Train all new personnel on the JHA

## **7. Review and Record Retention**

- Review JHA periodically to ensure accuracy.
  - If updates made, ensure all affected personnel are informed.
- Training records and JHAs shall be maintained per [the University Record Management and Archive Policy](#).
  - These records may be retained electronically or in hard copy format.

**See Figure 1 for an example of a completed JHA**

- ① In the Task column, identify each step (or task) required to complete the job. Consider preparation and clean-up, and be as thorough as possible. Number the steps sequentially.
- ② In the Hazard column, write down the hazards associated with the specific step.
- ③ In the Controls column, write down all safe practices and controls to mitigate the hazards.

JOB/TASK/EXPERIMENTAL PROCEDURE SAFETY AND HEALTH ANALYSIS			
DEPARTMENT: PI/SUPERVISOR: Mr. Supervisor		TASK/EXPERIMENTAL PROCEDURE: Using a Hand truck	
PREPARED BY: Ms. Driver			
REVIEWED BY:	DATE APPROVED:	REVIEW/REVISION DATE:	
PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS (PPE). If appropriate attach PPE Assessment: Gloves if necessary			
TRAINING/COMPETENCY REQUIRED: Operation of a Hand Truck PPE			
Step #	TASK ①	POTENTIAL SAFETY AND HEALTH HAZARDS ②	CONTROLS ③
1	Pre-operation Safety Check	<ul style="list-style-type: none"> <li>Untrained operator</li> </ul>	<ul style="list-style-type: none"> <li>Training on hand truck design, controls and instrumentation.</li> <li>Training on the hand truck stability and the proper way to transport, load, and stack on the hand truck.</li> </ul>
2	Assembling a load	<ul style="list-style-type: none"> <li>Rolling the wheels off the edge of ramps and loading docks.</li> </ul>	<ul style="list-style-type: none"> <li>Stay well back from the edge.</li> <li>Never turn around on the slope.</li> <li>When going down a ramp, keep the truck ahead of you. When going up, pull the truck behind you.</li> <li>Make sure the chisel of the truck is all the way under the load.</li> </ul>
3	Operating the Two-wheel Hand truck	<ul style="list-style-type: none"> <li>Slip/trip/fall</li> </ul>	<ul style="list-style-type: none"> <li>Slow down for turns.</li> <li>Make sure that you have enough overhead clearance.</li> </ul>
4	Transporting the load	<ul style="list-style-type: none"> <li>Pinching hands between the truck and other objects.</li> </ul>	<ul style="list-style-type: none"> <li>Be Alert</li> <li>Wear gloves to protect your hands.</li> <li>Strap bulky or dangerous cargo to the truck's frame.</li> <li>When moving a stack of objects, put the heavier ones on the bottom.</li> </ul>
5	Storing the hand truck	<ul style="list-style-type: none"> <li>Trip hazard</li> </ul>	<ul style="list-style-type: none"> <li>Store in a safe out of the way area.</li> </ul>

Figure 1. Example - Completed JHA for Operation of a Hand Truck.

## JHA Template

JOB/TASK/EXPERIMENTAL PROCEDURE SAFETY AND HEALTH ANALYSIS			
DEPARTMENT: PI/SUPERVISOR:		TASK/EXPERIMENTAL PROCEDURE:	
PREPARED BY:			
REVIEWED BY:		DATE APPROVED:	REVIEW/REVISION DATE:
PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS (PPE). If appropriate attach PPE Assessment:			
TRAINING/COMPETENCY REQUIRED:			
Step #	TASK	POTENTIAL SAFETY AND HEALTH HAZARDS	CONTROLS
1		•	•
2		•	•
3		•	•
4		•	•
5		•	•

You may insert rows below as necessary.