

Job Safety Analysis

Non-research operations have more accidents that result in injuries than any other work environment on the Berkeley campus. Over a five-year period, there have been four serious injuries resulting in Cal/OSHA investigations and fines of up to \$34,000. Over that same period, there have been hundreds of minor injuries and near misses on campus. Writing a Job Safety Analysis, establishing work rules, instructing workers to follow the work rules, and supervisor enforcement of work rules can help reduce injuries.

What is a Job Safety Analysis?

A Job Safety Analysis:

- identifies hazards associated with each step of any job or task that has the potential to cause serious injury
- determines how to control the hazards
- produces a written tool that can be used to train other staff
- meets Cal/OSHA training requirements by developing procedures and work rules that are specific for each job or task

Who Should Conduct a Job Safety Analysis?

Supervisors and staff who actually use the particular piece of equipment should work together to develop the JSA. Supervisors are responsible for writing the JSA, keeping it on file in the unit, training affected staff, and enforcing work rules. Staff who actually use the equipment should participate in the analysis, because they usually are the most knowledgeable about the hazards and have direct control over them.

JSA Forms

The Office of Environment, Health & Safety (EH&S) provides JSA forms and sample JSAs to assist you in developing JSAs.

A blank JSA form is attached to this Fact Sheet. The JSA form is also available on the EH&S web site at <http://www.ehs.berkeley.edu>.

Sample JSAs for some common operations are available in the JSA Library on the EH&S website (<http://ehs.berkeley.edu>). If you perform a similar operation, you can revise the sample to suit your work situation. You can use the sample as a starting point, but the finished JSA must be specific to each piece of equipment and each work unit.

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How to Conduct a Job Safety Analysis

Using a blank JSA form, complete the following steps. It is likely that each item written down will change in sequence or be re-defined during the process.

1. In the Task column, write down each step (or task) required to complete the job. Consider preparation and clean-up, and be as thorough as possible. Number the steps sequentially. For example:

fuel powered leaf blower

2. In the Hazard column, write down the hazards associated with each task. Consider all types of potential hazards:
 - a. PHYSICAL pinch points, moving parts, blades, heavy lifting, etc.
 - b. CHEMICAL lubricants, fuels, paints, solvents, cleaners, gases, etc.
 - c. ENVIRONMENTAL temperature extremes, dangerous terrain, insects/ animal bites/stings, etc.

They should be numbered in such a way that the hazard is clearly related to the task. For example:

1a. lifting/moving leaf blower and fuel can

1b. spilling fuel mixture

1c. fuel mixture contact with skin

3. In the Controls column, write down all the possible controls for each of the hazards identified in each of the tasks. There may be several controls that can be used for each hazard. For example:

1a-1. use proper lifting techniques (per shop training)

1b-1. use a proper fuel container with a filling nozzle and spark arrester (located...)

1b-2. fill tank over a drop cloth, place contaminated drop cloths in the flammable rag container

1b-3. fill tank no less than 1/2 inch from the top

1c-1. wear nitrile gloves

4. When you have finished listing the tasks, hazards, and controls, write down any training that is required to operate that equipment.
 - a. IIPP (Injury and Illness Prevention Program)
 - b. operation of the leaf blower
 - c. first aid procedures and location of the first aid kit
 - d. use of PPE
 - e. Write down the types of Personal Protective Equipment (PPE) that may have to be used to control the hazards.
 - i. safety glasses
 - ii. nitrile gloves

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Example of JSA Format

Task	Hazard	Controls
1. Fuel leaf blower	1a. Moving and lifting leaf blower and fuel can	1a-1. Use proper lifting techniques
	1b. Spilling fuel	1b-1. Use proper fuel can
	1c. Fuel contact with the skin	1b-2. Fill tank over drop cloth
		1b-3. Fill tank no less than ½ inch from the top
		1c-1. Wear nitrile gloves

Required Training	Required PPE
Leaf blower certificate	Face mask
on-the-job supervisor training	Nitrile gloves

EH&S Assistance

If possible, e-mail a copy of all completed JSAs to EH&S (ehs@uclink.berkeley.edu) so they can be posted online in the JSA Library on the EH&S web site.

EH&S will help develop the first JSA for each work unit and will train the supervisor and staff in conducting JSAs. Once trained, the supervisor and the employees who perform the work should develop the remaining JSAs for their operation. To schedule an appointment for assistance in conducting your first JSA, please call EH&S 642-3073.