

## **Job Hazard Analysis**

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## What's it called?

ABSS	JHA	RA
AHA	JSA	SJP
BMP	PCA	SOP
C&E	POA	SWP
FMEA	PHA	THA
FTA	PTP	VOE

Why do a JHA?

4 "Woulds"	
Would it truly benefit?	
Would there be top management support?	
Would supervisors embrace it?	
Would the affected workers own it?	
Source: Craig Hamelund, Oregon OSHA	
They must WANT to WANT it.	
Culture, anyone?	
Why a lab Harryd Archicia	
Why a Job Hazard Analysis (JHA) also known as Job Safety Analysis (JSA)	
<ul> <li>Effective in identifying hazards for a specific job and/or tasks</li> </ul>	
• Identifies unsafe work practices	
• Eliminates/reduces injuries and illnesses	
Raises employee safety awareness	
Valuable for on-the-job training	
Tool to develop safe procedures	

#### What is a Job Hazard Analysis

- Specific steps to a job
- Identifies hazardous conditions and unsafe practices
- Identifies the best control measures
- Best practice: Update as incidents occur to address unforeseen hazards and control measures

#### **JHA Process**

- Step 1 Watch the work being done
- Step 2 Break the job down into steps
- Step 3 Describe the hazards in each step
- Step 4 Set control measures for each hazard
- Step 5 Review with other workers
- Step 6 Update (annually, as job changes, etc.)



**RISK** 

Hazard



**Exposure** 

#### Risk= Probability for injury/illness Degree of injury/illness



#### Break it down...

#### **Probability**

- # of employees, hazards, opportunities
- Duration
- Proximity
- Complexity
- Workloads distress

#### Severity

- Reasonable
- Realistic
- Minor or life/death



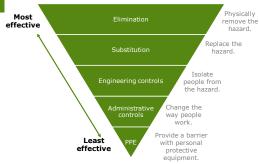
**But....remember KISS!** 

	Jol	b Hazard Analysis		
	Job:		Date of Analysis:	
	Conducted By:			
	Brief description of task and environment:			
	Sequence of Basic Job Steps	Potential Hazards	PPE/Controls	Needed Changes
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

## **Hazard identification**



### Hierarchy of hazard control



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•	• Develop JHA	for mowing	lawn		,	
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	Job:Mowing the lawn Conducted By:Wally Weedeater	Job Hazard Analysis	f Analysis: August 31, 2017	-	,	
	Brief description of task and environmen		PPE/Controls	Needed Changes		
1.	Remove lawn mower from garage and push it into the driveway.	Back/shoulder injuries from lifting and pushing.     Tripping over old hose, pots, and rakes.	Use proper body mechanics (keep load close, don't twist).  Push from the body core.	Create and maintain a clear storage area	,	
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		Job Hazard Analysis				
	Job: Mowing the lawn  Conducted By: Wally Weedeater  Brief description of task and environment	Date of	Analysis: August 31, 2017			

	- 1				
ı					Needed
- 1	s	sequence of Basic Job Steps	Potential Hazards	PPE/Controls	Changes
	1.	Remove lawn mower from garage and push it into the driveway.	Back/shoulder injuries from lifting and pushing.	Use proper body mechanics (keep load close, don't twist).	Create and maintain a
		push it into the driveway.	Tripping over old hose, pots, and rakes.	Push from the body core.	clear
			pots, and rakes.		storage area
ŀ	2.	Inspect mower to see that guards are in	Back/shoulder injuries	Keep load close to body,	area
		place and deadman switch is working.	from turning mower.  2. Amputations from rotating	bend knees. 2. Keep hands away from	
L			blades.	blades.	

	Je	ob Hazard Analysis		
	Job: Mowing the lawn	Date of Ana	lysis:August 31, 2017	
	Conducted By: Wally Weedeater		_	
	Brief description of task and environment:	Use XYZ lawn mower to cut lawn a	t 1234 Great View Drive	
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			Need	
1	Sequence of Basic Job Steps  Remove lawn mower from garage and	Potential Hazards 1. Back/shoulder injuries 1.	PPE/Controls Chan Use proper body mechanics Create	
	<ul> <li>Remove lawn mower from garage and push it into the driveway.</li> </ul>	Back/shoulder injuries from lifting and pushing.     Tripping over old hose, pots, and rakes.      Back/shoulder injuries (ke	sep load close, don't twist). mainta	na
L		pots, and rakes.	storage	
2	<ul> <li>Inspect mower to see that guards are in place and deadman switch is working.</li> </ul>	Back/shoulder injuries 1. from turning mower. ber	Keep load close to body, ad knees.	
		blades. bla	Keep hands away from des.	
3	Put fuel in mower using a gas can equipped with long spout (or funnel).	Exposure to gas vapors     1.	Wear gloves and safety Purcha	se tric
	1-4-44	<ol> <li>Fire and burns</li> <li>2.</li> </ol>	sses an elec Ensure there are no ignition mower proces in the vicinity	
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	J	ob Hazard Analysis		
30	bb: Mowing the lawn		Analysis: August 31, 2017	
	onducted By: Wally Weedeater		100,000	
В	rief description of task and environment:	Use XYZ lawn mower to cut la	wn at 1234 Great View Drive	
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				Needed
Se	equence of Basic Job Steps	Potential Hazards  1. Back/shoulder injuries from lifting and pushing.	PPE/Controls  1. Use proper body mechanics (keep load close, don't twist).	Changes Create and
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- 18	Remove lawn mower from garage and push it into the driveway.	from many and pushing.	(Keep load close, doll ( twist).	THOMPSONT O
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Using JHA with new hires	
Complete JHA while observing task	
Review with new worker	
Have them rewrite it (from memory!)	
Verifies understanding and training	
effectiveness	
7116 216 416	
JHA with other employees	
Combine	
• Procedures	
• PPE assessment	
Ergo assessments	
• Include in formal observation programs	
Continual improvement	
Other things to consider	
other tilligs to consider	
• Is the job performed the same by all?	
• Does it change with different products?	
• Is it easy to read and understand?	



Where to	) begin
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- What is the most hazardous job and why?
- Where are injuries occurring?
- Who should be involved in developing the JHA for this job?
- What form should you use?
- Routine vs. non-routine work?

#### **JHA Implementation**

- Management support
- Safety committee and supervisor support
- Prioritize jobs
- Get employees and supervisors involved
- Video tape the job
- Feedback from other workers doing job

JHA Implementation	
Have all current employees review	
<ul> <li>Training tool for new employees</li> </ul>	
<ul> <li>Update as job changes, hazards change, or if there is an injury</li> </ul>	
<ul> <li>Use JHA to create safe operating procedures</li> </ul>	
Establish a goal for completing JHAs	
JHA doesn't stand alone	
Inspections/observations	
• Audits (3 <sup>rd</sup> party)	
<ul> <li>Training/reporting/tracking</li> </ul>	
Safety committee	
Enforcement/accountability	
• Incentives?	
Summary	
<ul> <li>JHA most effective way to identify hazards for each step in the task</li> </ul>	
<ul> <li>Add redundant controls if PPE is the only control</li> </ul>	
Review and Update JHAs	
• Involve employees to increase awareness	

We are what we repeatedly do.	
Excellence, then, is not an act,	
but a habit Aristotle	

# Questions to think about

- How can you move through the process?
- Reaction from employer? From employees?
- Problems/barriers
- Culture struggle?



## **Hazard Identification Form**

Job/Task:	Assessment conducted by:				
Dept/Work area(s):	Reviewed by:				
<u> </u>		1			
Falls from elevation?	Slips/Trips/Falls on Same Surface?	Musculoskeletal Disorders			
Does the task require the employee to:  ☐ Use a ladder? ☐ Use or work on a raised platform? ☐ Work on a mezzanine? ☐ Work on a scissor or boom lift? ☐ Work from forklift work platform? ☐ Work on a loading dock? ☐ Work on top of equipment? ☐ Use stairs? ☐ Other?	Is the work done in an area with:  Congestion? Uneven walking surfaces? Material on floor? Cords/hoses on floor? Potential for spills? Potential for ice and/or snow? Poor lighting? Other?	USE Humantech BRIEF to identify:  Forceful Exertions  Awkward Postures  Static Postures  Repetitive Motions  Contact Pressure			
Chemicals/Hazardous Materials with Potential for Inhalation? (Review the MSDS)	Chemicals/Hazardous Materials with Potential Skin Contact? (Review MSDS)	Non-Ionizing and Ionizing Radiation?			
Is there a potential inhalation hazard from:  Paints?  Metal fumes & gases from welding/soldering?  Dusts from grinding/sanding/blasting?  Dusts/mists/vapors while filling machines, tanks, reservoirs etc.?  Cleaning chemicals?  Solvents or other volatile chemicals?  Dip tank operations?  Compressed gases?  Products of combustion and thermal degradation from (heating plastics or other material)?  Oxygen deficient atmosphere (confined space)?  Other chemical hazards?	☐ Is there potential contact with bodily fluids?	Work activities, such as:  ☐ Continuous Noise? ☐ Impact Noise? ☐ Vibration? ☐ Heat Stress (Hot Environment)? ☐ Cold Stress (Cold Environment)? ☐ Lasers? ☐ Ultraviolet or infrared light? ☐ Radiofrequency/microwave radiation? ☐ X-Rays? ☐ Other?			
Electrical Hazards?	Hot Work?	Hazards from Pressure?			
Could employee be exposed to:  Exposed electrical wiring or components?  Arc flash?  Other electrical hazards?	Does the work create or is the work done in proximity to:    Flame and/or spark?   Hot surfaces?   Flammable or combustible chemicals?   Other conditions that could create a fire?	Is the work done in proximity to or require the use of:  Hydraulic pressure? Pneumatic pressure? Water pressure?			

Mechanical Hazards?	Mechanical Hazards (examples)	Vehicles?
Does the work require using equipment with moving parts:  Does equipment cut, bend, shear, punch? Is there access to the point of operation? (e.g. saws, press brake, shear, punch press) Are there rotating shafts/shaft projections? Are there rotating chucks, drill bits? Are there reciprocating or transverse motions? Nips points at fly-wheels, augers? Nip points at in-running rollers? Nip points at belts, pulleys, chains, gears (mechanical power-transmission)? Are robotics present?  Could employee be struck or cut by: Saw blades? Abrasive wheels? Hand tools? Knives? Other items or tools?	Review OR-OSHA guarding publication at:  www.orosha.org/pdf/pubs/2980.pdf and/or OSHA e-tool at:  www.osha.gov/SLTC/etools/machineguarding/in dex/html	□ Does the work require use of a vehicle? □ Is there vehicle traffic in the area?

Other Hazards and Observations:

# **Job Hazard Analysis**

Job:	_Mowing the lawn		Date of Analysis:	August 31, 2017
Conducted By: _	Wally Weedeater			
Brief description (	of task and environment.	Use XY7 Jawn mower	to cut lawn at 1234	1 Great View Drive

				Needed
	Sequence of Basic Job Steps	Potential Hazards	PPE/Controls	Changes
1.	Remove lawn mower from garage and push it into the driveway.	<ol> <li>Back/shoulder injuries from lifting and pushing.</li> <li>Tripping over old hose, pots, and rakes.</li> </ol>	Use proper body mechanics (keep load close, don't twist).  Push from the body core.	Create and maintain a clear storage area
2.	Inspect mower to see that guards are in place and deadman switch is working.	<ol> <li>Back/shoulder injuries from turning mower.</li> <li>Amputations from rotating blades.</li> </ol>	<ol> <li>Keep load close to body, bend knees.</li> <li>Keep hands away from blades.</li> </ol>	
3.	Put fuel in mower using a gas can equipped with long spout (or funnel).	<ol> <li>Exposure to gas vapors</li> <li>Skin contact with gas</li> <li>Fire and burns</li> </ol>	<ol> <li>Wear gloves and safety glasses</li> <li>Ensure there are no ignition sources in the vicinity</li> </ol>	Purchase an electric mower
4.	Walk yard to remove debris and identify holes	1. Slips and falls	<ol> <li>Boots with non-slip soles</li> <li>Use small steps to avoid slipping</li> </ol>	Build retaining wall and remove slope
5.	Mow lawn using horizontal motion across hill. Pivot at end of run and reverse across hill.	<ol> <li>Slip on hill</li> <li>Amputation when mower runs over foot</li> <li>Flying debris</li> <li>Noise</li> <li>UV exposure from sunlight</li> </ol>	<ol> <li>Boots, safety glasses, and hearing protection.</li> <li>Use small steps to prevent slipping.</li> <li>Wear long sleeves and sunscreen.</li> </ol>	

Comments: (frequency/duration info, etc.): Job is done once per week and takes 2 hours.

# **Job Hazard Analysis**

Job:	Date of Analysis:
Conducted By:	
Brief description of task and environment:	

	Sequence of Basic Job Steps	Potential Hazards	DDF/Controls	Needed Changes
1.	Sequence of Basic 300 Steps	r oteritiai riazai us	FFL/Controls	Changes
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Comments: (frequency/duration info etc): (e.g., Job is done once per week and takes 2 hours)