

# **Non-lab Hazard Assessments and PPE Certifications**

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Cal/OSHA's Injury and Illness Prevention Program, 8 CCR §3203 (a)(4), requires a hazard assessment in your IIPP:

*“(4) Include procedures for **identifying and evaluating work place hazards** including scheduled periodic inspections to identify unsafe conditions and work practices. Inspections shall be made to identify and evaluate hazards.”*

# Job Safety Analysis (JSA) Example

SEQUENCE OF JOB STEPS (Job Function)	POTENTIAL HAZARDS	SAFE JOB PROCEDURE (Safe Practice, Apparel, or Equipment)
<ol style="list-style-type: none"> <li>1. Place the ladder in proper position</li> <li>2. Step up on ladder</li> <li>3. Retrieve item from stock shelf</li> <li>4. Step down from ladder</li> </ol>	<ol style="list-style-type: none"> <li>1. Falls from the ladder</li> <li>2. Falls from the ladder</li> <li>3. Slipping from ladder Dropping stock item</li> <li>4. Slipping or falling from ladder</li> </ol>	<ol style="list-style-type: none"> <li>1. Make sure base of ladder is stable. Get some-one to hold the ladder to insure stability</li> <li>2. Maintain balance by holding onto back of ladder. Step up on ladder one rung at a time.</li> <li>3. Maintain firm grip on ladder while reaching item with other hand. Do not over-extend/reach.</li> <li>4. Step down slowly. If necessary hand item to another person. Move down one rung at a time. Maintain balance.</li> </ol>

## How do you identify and evaluate hazards ?

Just like a JSA, a Job Hazard Assessment (JHA) is also a simple 3 to 4 step process:

1. Identify the task, equipment/tool or activity
2. Assess and list the potential hazard(s)
3. Assess and list how you'll control the hazard(s), and
4. Personal Protective Equipment (PPE) HA/Certification, if needed

# JHA Sample Format

IIPP Hazard Assessment - Part I			
Dept.:			
Group:			
Certification Signature(s):			
Completed by:			
Date			
	<p><b>HAZARD EXAMPLES:</b> Impact, penetration, rolling, pinching, slip, trip or fall, compression, ergonomic or body positioning, fall from elevated surface, pierce, cut, abrasion or penetration, struck by or against object, caught in between, stress or strain, material handling, lifting, pushing, Hazard examples: Pulling, reaching, electrical (shock/arc), repetitive motion, chemical, biological, infectious disease, optical, or radiation exposure, thermal/heat/burns, respiratory chemicals, fumes, dust</p>	<p><b>CONTROL HIERARCHY</b>            1. Engineering style controls (i.e. machine guarding),            2. Administrative controls (i.e. SOP's),            3. Work practices (i.e. training), or            4. Personal Protective Equipment</p>	
ACTIVITY	HAZARD	CONTROL	Personal Protective Equipment
Job Hazard Activity; Describe task, procedure, equipment or tool use, etc.	Describe Job Hazard	Describe present hazard control practice	Is Personal Protective Equipment required ? If Yes, complete Part II
<b>Climbing ladders</b>	<b>Climb ladders to access plumbing connections for installation or maintenance</b>	<b>Ladder Safety training</b>	<b>No PPE required</b>

## Step 1. Identify tasks/activities/equipment

- Schedule and meet with supervisors
- Use the JHA format (try using Excel)
- List and group similarities when possible:
  - Employee job duties
  - Employee job activities
  - Equipment employees use
  - Tools employees use
  - Chemicals and procedures

**Generic Tasks  
(equipment, tools, activities)**

Working on Ladders	Pipe threading machine
Working at unprotected edges: Fall protection	Portable grinders
Operating a Drill press	Working under sinks
Brazing and Soldering	Work at the Primate Center
Welding and cutting	General work in laboratories
Using snake equipment	Working in manholes or lift stations
Lifting, using chain falls and hoists	Working in crawl spaces
Band Saw	Portable grinders
Chop Saw	Working with hazardous chemicals

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## Step 2. List the Hazards

### Discuss and understand. What are hazards?

- Slip, trip or fall
- Fall from elevated surface
- Pierce, cut, abrasion or penetration
- Struck by or against object
- Caught in between
- Stress or strain (knee, back, shoulder)
- Material handling
- Lifting, pushing, pulling, or reaching
- Repetitive motion
- Ergonomics
- Body positioning/mechanics
- Mechanical:
  - Impact
  - Penetration
  - Rolling
  - Pinching
  - Compression
- Electrical (shock/arc)
- Chemical exposure
- Biological, infectious disease
- Optical or Radiation exposure
- Thermal/heat/burns
- Respiratory chemicals, fumes, dust
- Sound/Noise (hearing)

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# Hierarchy of Control

1. Elimination or Substitution
2. Engineering Controls (i.e. Machine Guarding)
3. Administrative Controls (i.e. SOP's, Safe Work Practices, Training)
4. Personal Protective Equipment

## Step 3. List the Controls

### Examples:

- Developing, training & following SOP's
- Teaching proper lifting
- Using proper material handling equipment
- Machine guards
- Ergonomic Assessments
- Slip resistant shoes
- Safety Training on equipment
- Behavioral awareness
- Lockout-tag out procedures
- Labels/signage
- Ventilation
- PPE (i.e. safety glasses, gloves, earplugs)

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Cal/OSHA's 8 CCR §3380 (f), Hazard Assessment and Equipment Selection, requires employers to:

*(1) **Assess** the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of PPE. If such hazards are present, or likely to be present, the employer shall:*

- (A) **Select**, and have each affected employee use, the types of identified PPE;*
- (B) **Communicate** selection decisions; and,*
- (C) Select PPE that properly **fits** each affected employee.*

*(2) **Verify that the required workplace hazard assessment has been performed through a written certification.***

**Cal/OSHA's 8 CCR §3380 (f), Hazard Assessment and Equipment Selection**, requires employers to:

*3) Provide training. Each such employee shall be trained to know at least the following:*

- (A) When PPE is necessary;*
- (B) What PPE is necessary;*
- (C) How to properly don, doff, adjust, and wear PPE;*
- (D) The limitations of the PPE; and,*
- (E) The proper care, maintenance, useful life and disposal of the PPE.*

**Training must be documented.**

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# PPE Hazard Assessment

## Example: Plumbers

Personal Protective Equipment (PPE) Assessment													
LOCATION: Facilities Management - Plumbing Shop													
Date: 2/20/2014													
X = Required R = recommended but optional													
JOB TASK HAZARD ASSESSMENT (Equipment or other operations)	Head	Hands	Arm	Trunk	Legs	Whole Body	Eyes	Face	Ears	Lungs	Knees	Feet	Required PPE
Working on Ladders	R	X					X		X			X	Hard hat or bump cap, leather gloves, safety glasses (or goggles), hearing protection (as required by noise level), steel toed shoes.
Work Above ceiling	X	X					X					X	Hard hat or bump cap, leather gloves, safety glasses (or goggles), steel toed shoes.
Fall protection	X	X		X			X		X			X	Hard hat or bump cap, leather gloves, harness with lanyard, safety glasses (or goggles), hearing protection were required due to noise levels, steel toed shoes.
Drill press		X					X		X			X	Leather gloves, safety glasses (or goggles), hearing protection, steel toed shoes.

*Think safe. Act safe. Be safe.*

# PPE Hazard Assessment

## Example: Primate Center

Personal Protective Equipment (PPE) Assessment												
LOCATION:	Primate Center											
Certification:												
Assessment Date:												
JOB TASK HAZARD ASSESSMENT (Equipment or other operations)	Head	Hands	Arm	Trunk	Whole Body	Eyes	Face	Ears	Lungs	Knees	Feet	Required PPE
Entering, <u>non-infectious</u> primate housing rooms any activity; feeding, cleaning, weighing, health observations, moving primates, testing or exams		X	X	X		X	X				X	Latex or nitrile gloves, gowns, Tyvek sleeves, face shields or goggles, surgical mask, dedicated shoes or booties
Entering, <u>infectious</u> primate housing rooms any activity; feeding, cleaning, weighing, health observations, moving primates, testing or exams	X	X	X	X		X	X				X	Hairnet, latex or nitrile 'double' gloves, gowns, Tyvek sleeves, face shields or goggles, surgical mask, dedicated shoes or booties
Entering, <u>respiratory or aerosolized hazard</u> primate housing rooms any activity; feeding, cleaning, weighing, health observations, moving primates, testing or exams	X	X	X	X		X	X		X		X	Hairnet, latex or nitrile 'double' gloves, gowns, Tyvek sleeves, face shields or goggles, surgical mask, dedicated shoes or booties, plus N95 or PAPR respiratory protection

***Think safe. Act safe. Be safe.***

1. Identify the task, equipment/tool or activity
  - Interview your supervisors
2. Assess and list the potential hazard(s)
3. Assess & list how you'll control the hazard(s), and if required,
4. Establish the Personal Protective Equipment (PPE) requirements