



Oregon  
**OSHA**

# Personal Protective Equipment Hazard Assessment

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## About this guide

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“Personal Protective Equipment Hazard Assessment” is an Oregon OSHA Standards and Technical Resources Section publication.

## Piracy notice

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# Table of contents

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<b>What is a PPE hazard assessment</b> .....	2
<b>Why should you do a PPE hazard assessment?</b> .....	2
<b>What are Oregon OSHA’s requirements for PPE hazard assessments?</b> .....	3
<b>Oregon OSHA’s hazard assessment rules</b> .....	3
<b>When is PPE necessary?</b> .....	4
<b>What types of PPE may be necessary?</b> .....	5
<b>Table 1: Types of PPE</b> .....	5
<b>How to do a PPE hazard assessment</b> .....	8
<b>Do a baseline survey to identify workplace hazards</b> .....	8
<b>Evaluate your employees’ exposures to each hazard identified in the baseline survey</b> .....	9
<b>Document your hazard assessment</b> .....	10
<b>Do regular workplace inspections</b> .....	11

# What is a PPE hazard assessment

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A personal protective equipment (PPE) hazard assessment is an evaluation of your workplace that helps you determine what hazards your employees are exposed to and what PPE they need to protect themselves. A hazard assessment should include:

- The jobs (or tasks) that your employees do
- The hazards your employees are exposed to
- Where the hazards are located
- The likelihood that those hazards could injure your employees
- The severity of a potential injury
- The types of PPE necessary to protect your employees from those hazards

## Why should you do a PPE hazard assessment?

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There are three reasons:

1. A hazard assessment will help you find hazards at your workplace.
2. A hazard assessment will help you determine what personal protective equipment your employees need for protection.
3. Oregon OSHA's requires that you do one.



# What are Oregon OSHA's requirements for PPE hazard assessments?

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If you are a general industry, construction, or agricultural employer you must determine if your workplace has hazards that you cannot eliminate or control without PPE. If there are such hazards, you must:

- Select the PPE that protects your employees from the hazards
- Communicate your selection decisions to each affected employee
- Ensure that the PPE fits each employee
- Require your employees to use their PPE when they are exposed to the hazards

**General industry employers** must also prepare a document that says they have done the hazard assessment. The document must include:

- A heading that says the document is a “certification” of the hazard assessment
- The name of the workplace evaluated
- The name of the person certifying the hazard assessment was completed
- The date of the hazard assessment

## Oregon OSHA's hazard assessment rules

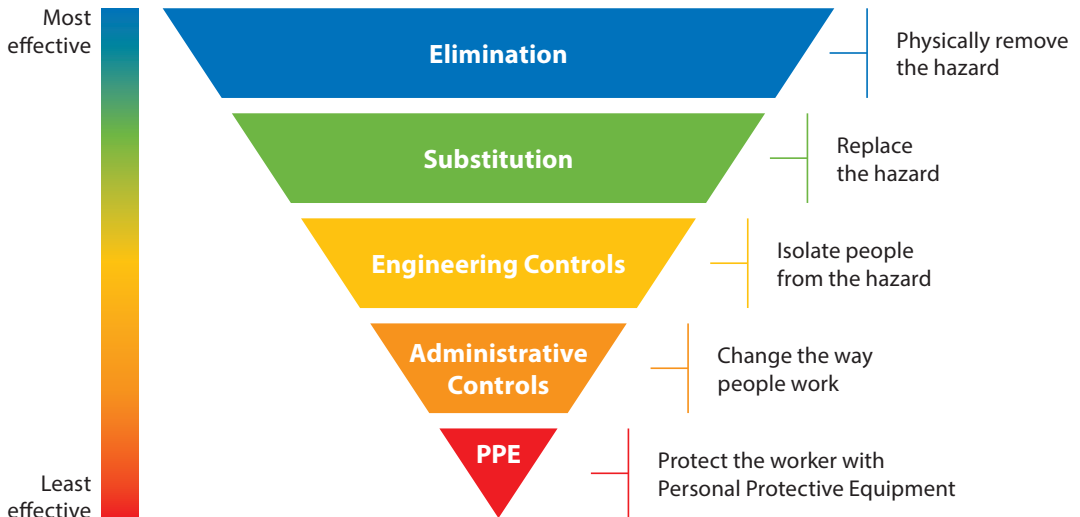
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- *General industry: 437-002-0134(1)*, Hazard assessment and equipment selection. Appendix B to Subdivision 2/I has guidelines for conducting a hazard assessment.
- *Construction: 437-003-0134(1)*, Hazard assessment and equipment selection. Appendix B to Subdivision 2/I has guidelines for conducting a hazard assessment.
- *Agriculture: 437-004-1005(2)*, Hazard assessment and protective equipment selection. Appendix A to Subdivision 4/I has a sample hazard assessment form.

# When is PPE necessary?

PPE is necessary when your employees are exposed to a hazard that you cannot eliminate or control any other way.

## Hierarchy of Controls



Although PPE is another way to control a hazard, it is only a barrier between the hazard and the worker. When PPE does not properly fit a worker or the worker does not use it correctly, the worker risks exposure.

Before you purchase PPE, know what hazards it protects against and be sure it fits the person using it. If you are unsure, ask someone who is familiar with the type of PPE you need — especially when you are selecting respirators or chemical-protective clothing.

Always train employees how to wear, use, and maintain their PPE before they use it the first time. Training must also include the types of PPE that are necessary and the limitations of the PPE.

# What types of PPE may be necessary?

What types of PPE may be necessary?

Your hazard assessment should determine if your employees need any of the following types of PPE:

- Eye and face protection
- Fall protection
- Foot protection
- Hand/general skin protection
- Head protection
- Hearing protection
- Leg protection
- Personal floatation device
- Respiratory protection
- Torso/general body protection

Table 1 shows these basic types of PPE and gives examples of the hazards they can control.

<b>Table 1: Types of PPE</b>		
<b>PPE</b>	<b>Typical hazards controlled</b>	<b>Personal protective equipment rules by industry</b>
Eye and face protection	<ul style="list-style-type: none"> <li>• Dust, dirt, metal, or wood chips from chipping, grinding, sawing, hammering, and from power tools</li> <li>• Chemical splashes from corrosive substances, hot liquids, and solvents</li> <li>• Objects such as tree limbs, chains, tools, and ropes that swing into the eyes or face</li> <li>• Radiant energy from welding and harmful rays from lasers or other radiant light</li> </ul>	<p>General Industry, see 437-002-0134(8)</p> <p>Construction, see 437-003-0134(8)</p> <p>Agriculture, see 437-004-1035</p> <p>Forest Activities, see 437-007-0315</p>

**Table 1: Types of PPE**

<b>PPE</b>	<b>Typical hazards controlled</b>	<b>Personal protective equipment rules by industry</b>
Fall protection (includes personal fall arrest and fall restraint systems)	<ul style="list-style-type: none"> <li>• Falls from unguarded surfaces</li> <li>• Tree climbing</li> </ul>	<p>General Industry, see 437-002-0134(5)</p> <p>Construction, see Division 3/M Fall Protection, 1926.760, 1926.1423, 437-003-1423</p> <p>Agriculture, see 437-004-1020</p> <p>Forrest Activities, see Division 7/P Tree climbing</p>
Foot protection	<ul style="list-style-type: none"> <li>• Heavy objects such as barrels or tools that might roll onto or fall on a worker’s feet</li> <li>• Sharp objects such as nails or spikes that could pierce the soles or uppers of ordinary shoes</li> <li>• Molten metals, other hot materials</li> <li>• Energized electrical equipment</li> </ul>	<p>General Industry, see 437-002-0134(10)</p> <p>Construction, see 437-003-0134(10)</p> <p>Agriculture, see 437-004-1060</p> <p>Forest Industries, see 437-007-0330</p>
Hand and skin protection	<ul style="list-style-type: none"> <li>• Harmful or hazardous temperatures</li> <li>• Chemicals that can be absorbed into the skin or cause burns</li> <li>• Energized electrical equipment</li> <li>• Mechanical equipment that can cause bruises, abrasions, cuts, punctures, fractures, or amputations</li> </ul>	<p>General Industry, see 437-002-0134(12) and (13)</p> <p>Construction, see 437-003-0134(12) and (13)</p> <p>Agriculture, see 437-004-1060</p> <p>Forest Industries, see 437-007-0320</p>



**Table 1: Types of PPE**

<b>PPE</b>	<b>Typical hazards controlled</b>	<b>Personal protective equipment rules by industry</b>
Head protection	<ul style="list-style-type: none"> <li>• Overhead objects that could fall</li> <li>• Exposed pipes or beams</li> <li>• Energized electrical equipment</li> <li>• Contact with objects while traveling in open vehicles</li> </ul>	<p>General Industry, see 437-002-0134(9)</p> <p>Construction, see 437-003-0134(9)</p> <p>Agriculture, see 437-004-1050</p> <p>Forest Industries, see 437-007-0305</p>
Hearing protection	<ul style="list-style-type: none"> <li>• Occupational noise exposure that equals or exceeds 85 dBA, averaged over eight hours</li> </ul>	<p>General Industry and Construction, see 1910.95</p> <p>Agriculture, see 437-004-0630</p> <p>Forest Industries, see 437-007-0335</p>
Leg protection	<ul style="list-style-type: none"> <li>• Hot substances</li> <li>• Dangerous chemicals</li> <li>• Cuts from sharp tools such as chain saws</li> </ul>	<p>General Industry, see 437-002-0134(11)</p> <p>Construction, see 437-003-0134(11)</p> <p>Agriculture, see 437-004-1060</p> <p>Forest Industries, see 437-007-0325</p>
Personal floatation device (PFD)	<ul style="list-style-type: none"> <li>• Drowning</li> </ul>	<p>General Industry, see 437-002-1039 and 437-002-1139</p> <p>Construction, see 1926.106</p> <p>Agriculture, see 437-004-1070 and 437-004-1075</p> <p>Forest Industries, see 437-007-0340</p>

**Table 1: Types of PPE**

<b>PPE</b>	<b>Typical hazards controlled</b>	<b>Personal protective equipment rules by industry</b>
Respiratory protection	<ul style="list-style-type: none"><li>• Not enough oxygen in the air</li><li>• Harmful air contaminants (Examples include particulates, gases and vapors, and biological organisms)</li><li>• Whether a substance is harmful depends on toxicity, chemical state, physical form, concentration, and the period of time one is exposed.</li></ul>	General Industry and Construction, see 1910.134  Agriculture, see 437-004-1041 and Division 4/W Worker Protection Standard  Forest Activities, see 437-007-0345 and 437-007-0350
Torso and general body protection  (including high visibility garments)	<ul style="list-style-type: none"><li>• Harmful or hazardous temperatures and humidity</li><li>• Hot splashes from molten metal and other hot liquids</li><li>• Impacts from tools, machinery, and materials</li><li>• Hazardous chemicals</li><li>• Ionizing radiation</li><li>• Moving vehicles</li></ul>	General Industry, see 437-002-0134(6) and (7), also, see 437-002-0144(2)  Construction, see 437-003-0134(6) and (7)  Agriculture, see 437-004-1030  Forest Activities, see 437-007-0310

## How to do a PPE hazard assessment

### Do a baseline survey to identify workplace hazards

A baseline survey is a thorough evaluation of your entire workplace – including work processes, tasks, and equipment – that identifies safety and health hazards. A complete survey will tell you what the hazards are, where they are, and how severe a potential injury could be. The second column in Table 1 includes hazards to consider in your baseline survey.

## Suggestions:

Use safety data sheets (SDS) to identify chemical hazards. A safety data sheet has detailed information about a hazardous chemical's health effects, its physical and chemical characteristics, and safe handling practices.

Review equipment owner and operator manuals to determine the manufacturer's safety warnings and recommended PPE.

Do a job-hazard analysis. A job-hazard analysis (JHA) is a method of identifying, assessing, and controlling hazards associated with specific jobs. A JHA breaks down a job into tasks. You evaluate each task to determine if there is a safer way to do it. A job-hazard analysis works well for jobs with difficult-to-control hazards and jobs with histories of accidents or near misses. JHAs for complex jobs can take a considerable amount of time and expertise to develop. You may want to have a safety professional help you.

Have an experienced safety professional survey your workplace with you.

## Evaluate your employees' exposures to each hazard identified in the baseline survey

Consider the employee's task, the likelihood that the employee would be injured without PPE, and the severity of a potential injury.

### An example:

**The task:** A worker uses a plasma cutter to make decorative wall art out of thoroughly cleaned oil barrels.

**The outcome:** Hot metal sparks from the cutting process burns through the worker's clothing causing severe skin burns.

Although the used oil container was properly cleaned, tested, and declared free of flammable vapors, the process of using a plasma cutter on metal produces sparks and other hazards.

An effective PPE hazard assessment would have produced the following information:

**Task:** Using a plasma cutter.

**Hazards:** The plasma-cutting arc produces hot metal and sparks, especially during the initial piercing of the metal. It also heats the work piece and the cutting torch.

Never cut closed or pressurized containers such as tanks or drums that could explode. Never cut containers that may have held combustible or toxic or reactive materials unless they have been cleaned, tested, and declared safe by a qualified person.

**Likelihood of injury without PPE:** High

**Severity of a potential injury:** Life-threatening burns

**PPE necessary for the task:**

**Body:** Flame-resistant clothing or clothing made from tightly woven material such as leather, wool, or heavy denim.

**Eyes and face:** safety glasses with side shield or face shield; welding helmet with shaded eye protection for welding tasks.

**Feet:** high-top leather shoes or boots.

**Hands:** flame-resistant gloves.

**Respiratory protection:** local ventilation at the worksite and appropriate respirator if ventilation is not adequate to remove air contaminants.

**Document your hazard assessment**

Your documentation must include the following information:

- A heading that says the document is a “certification” of the hazard assessment
- The name of the workplace evaluated
- The name of the person certifying the hazard assessment was completed
- The date of each hazard assessment

Make sure your documentation includes this information for each job assessed:

**PPE hazard assessment certification**

Workplace evaluated: \_\_\_\_\_

Person certifying the evaluation: \_\_\_\_\_

Hazard assessment date: \_\_\_\_\_

You can use the [PPE hazard assessment form](#) on our website that you can download and use to do your own hazard assessment.

Construction industry and agricultural employers do not have to document their hazard assessments, but must tell each exposed employee about their PPE selection decisions and meet other rule requirements.

### **Do regular workplace inspections**

Regular inspections tell you whether you have eliminated or controlled existing hazards, and help you identify new hazards. Quarterly inspections by employees trained in hazard recognition are a good way to get the job done.

Look for new hazards whenever you change equipment, materials, or work processes. Determine what hazards could result from the changes and how to control them. If your business works at multiple sites, you may need to do a hazard assessment at each site.

### **Notes**

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# Oregon OSHA Services

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Oregon OSHA offers a wide variety of safety and health services to employers and employees:

## Enforcement

- ▶ **503-378-3272; 800-922-2689; [enforce.web@oregon.gov](mailto:enforce.web@oregon.gov)**
- Offers pre-job conferences for mobile employers in industries such as logging and construction.
- Inspects places of employment for occupational safety and health hazards and investigates workplace complaints and accidents.
- Provides abatement assistance to employers who have received citations and provides compliance and technical assistance by phone.

## Consultative Services

- ▶ **503-378-3272; 800-922-2689; [consult.web@oregon.gov](mailto:consult.web@oregon.gov)**
- Offers no-cost, on-site safety and health assistance to help Oregon employers recognize and correct workplace safety and health problems.
- Provides consultations in the areas of safety, industrial hygiene, ergonomics, occupational safety and health programs, assistance to new businesses, the Safety and Health Achievement Recognition Program (SHARP), and the Voluntary Protection Program (VPP).

## Standards and Technical Resources

- ▶ **503-378-3272; 800-922-2689; [tech.web@oregon.gov](mailto:tech.web@oregon.gov)**
- Develops, interprets, and gives technical advice on Oregon OSHA's safety and health rules.
- Publishes safe-practices guides, pamphlets, and other materials for employers and employees.
- Manages the Oregon OSHA Resource Center, which offers safety videos, books, periodicals, and research assistance for employers and employees.

## Appeals

- ▶ **503-947-7426; 800-922-2689; [admin.web@oregon.gov](mailto:admin.web@oregon.gov)**
- Provides the opportunity for employers to hold informal meetings with Oregon OSHA on concerns about workplace safety and health.
- Discusses Oregon OSHA's requirements and clarifies workplace safety or health violations.
- Discusses abatement dates and negotiates settlement agreements to resolve disputed citations.

# Oregon OSHA Services

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## Conferences

- ▶ **503-378-3272; 888-292-5247, Option 1; [oregon.conferences@oregon.gov](mailto:oregon.conferences@oregon.gov)**
- Co-hosts conferences throughout Oregon that enable employees and employers to learn and share ideas with local and nationally recognized safety and health professionals.

## Public Education

- ▶ **503-947-7443; 888-292-5247, Option 2; [ed.web@oregon.gov](mailto:ed.web@oregon.gov)**
- Provides workshops and materials covering management of basic safety and health programs, safety committees, accident investigation, technical topics, and job safety analysis.

## Need more information? Call your nearest Oregon OSHA office.

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### Salem Central Office

350 Winter St. NE  
Salem, OR 97301-3882

**Phone:** 503-378-3272

**Toll-free:** 800-922-2689

**Fax:** 503-947-7461

**en Español:** 800-843-8086

**Website:** [osha.oregon.gov](http://osha.oregon.gov)

### Bend

Red Oaks Square  
1230 NE Third St., Suite A-115  
Bend, OR 97701-4374

541-388-6066

*Consultation:* 541-388-6068

### Eugene

1500 Valley River Drive, Suite 150  
Eugene, OR 97401-4643

541-686-7562

*Consultation:* 541-686-7913

### Medford

1840 Barnett Road, Suite D  
Medford, OR 97504-8250  
541-776-6030

*Consultation:* 541-776-6016

### Pendleton

200 SE Hailey Ave.  
Pendleton, OR 97801-3056  
541-276-9175

*Consultation:* 541-276-2353

### Portland

Durham Plaza  
16760 SW Upper Boones Ferry Road, Suite 200  
Tigard, OR 97224-7696

503-229-5910

*Consultation:* 503-229-6193

### Salem

1340 Tandem Ave. NE, Suite 160  
Salem, OR 97301  
503-378-3274

*Consultation:* 503-373-7819

## **Salem Central Office**

350 Winter St. NE  
Salem, OR 97301-3882

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