

Oregon OSHA's *quick guide* to the **PPE hazard assessment**



What you should know and not a word more!



A Division of the
Department of Consumer
and Business Services

About this guide

Oregon OSHA quick guides are for employers and employees who want to know about Oregon OSHA's requirements and quickly get back to business.

Who should read this guide?

Read this guide if you want to learn:

- What a PPE hazard assessment is
- Why you should do a PPE hazard assessment
- When your employees should use PPE
- How to do a PPE hazard assessment

We want you to understand what you read. Every Oregon OSHA quick guide comes with a **plain-language guarantee**. Tell us if you're not satisfied. Contact Ellis Brasch at ellis.k.brasch@state.or.us.

Layout, design, and editing

- Ron Conrad: DCBS Communications, layout and design
- Mark Peterson: DCBS Communications, editing and proofing

Reprinting, excerpting, or plagiarizing this publication is fine with us! Please inform us of your intention as a courtesy.

Contents

What is a PPE hazard assessment?	4
Why should you do a PPE hazard assessment?	4
What are Oregon OSHA's requirements for PPE hazard assessments?	4
When is PPE necessary?.....	5
What types of PPE may be necessary?	6
How to do a PPE hazard assessment	9

What is a PPE hazard assessment?

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?

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?

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 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

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 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.

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?

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 protection
- Head protection
- Hearing protection
- Leg protection
- Respiratory protection
- Torso and abdominal protection



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

Table 1: Types of PPE		
PPE	Typical hazards controlled	Covered by our personal protective equipment rule?
Torso protection	<ul style="list-style-type: none"> • Harmful or hazardous temperatures and humidity • Hot splashes from molten metal and other hot liquids • Impacts from tools, machinery, and materials • Hazardous chemicals • Ionizing radiation • Moving vehicles 	Yes; see 437-002-0134(6), <i>Work Clothing</i> ; 437-002-0134(7), <i>High Visibility Garments</i> ; see also 437-002-0144(2), <i>Additional Oregon Rules for General Environmental Controls</i>

Table 1: Types of PPE

PPE	Typical hazards controlled	Covered by our personal protective equipment rule?
Eye and face protection	<ul style="list-style-type: none"> • Dust, dirt, metal, or wood chips from chipping, grinding, sawing, hammering, and from power tools • Chemical splashes from corrosive substances, hot liquids, and solvents • Objects such as tree limbs, chains, tools, and ropes that swing into the eyes or face • Radiant energy from welding and harmful rays from lasers or other radiant light 	Yes; see 437-002-0134(8), <i>Eye and Face Protection</i>
Head protection	<ul style="list-style-type: none"> • Overhead objects that could fall • Exposed pipes or beams • Energized electrical equipment 	Yes; see 437-002-0134(9), <i>Head Protection</i>
Foot protection	<ul style="list-style-type: none"> • Heavy objects such as barrels or tools that might roll onto or fall on a worker's feet • Sharp objects such as nails or spikes that could pierce the soles or uppers of ordinary shoes • Molten metal • Hot, wet, or slippery surfaces • Energized electrical equipment 	Yes; see 437-002-0134(10), <i>Foot Protection</i>
Leg protection	<ul style="list-style-type: none"> • Hot substances • Dangerous chemicals • Cuts from chain saws 	Yes; see 437-002-0134(11), <i>Leg Protection</i>

Table 1: Types of PPE

PPE	Typical hazards controlled	Covered by our personal protective equipment rule?
Hand protection	<ul style="list-style-type: none"> • Harmful or hazardous temperatures • Chemicals that can be absorbed into the skin or cause burns • Energized electrical equipment • Mechanical equipment that can cause bruises, abrasions, cuts, punctures, fractures, or amputations 	<p>Yes; see 437-002-0134(12), <i>Hand Protection</i> and 437-002-0134(13), <i>Skin Protection</i></p>
Hearing protection	<ul style="list-style-type: none"> • Excessive noise 	<p>Yes – Ear plugs or ear muffs are required when workers are exposed to noise that equals or exceeds 85 dBA, averaged over eight hours. See also 1910.95, <i>Occupational Noise Exposure</i>.</p>
Respiratory protection	<ul style="list-style-type: none"> • Harmful substances and below normal concentrations of oxygen in the air. What makes a substance harmful depends on its toxicity, chemical state, physical form, concentration, and the period of time one is exposed. Examples include particulates, gases and vapors, and biological organisms. 	<p>Yes – Appropriate respirators are required when workers are exposed above <i>permissible exposure limits</i> (PEL) for specific air contaminants, listed in 437-002-0382, <i>Oregon Rules for Air Contaminants</i>; see also <i>Respiratory Protection</i>, 1910.134.</p>
Fall protection	<ul style="list-style-type: none"> • Falls from unguarded surfaces more than 10 feet above a lower level or any height above dangerous equipment. 	<p>Yes – PPE includes personal fall arrest systems and personal fall restrain systems. See 437-002-0134(5), <i>Personal Protective Equipment, Fall protection</i>; 1926.502(d), <i>Personal Fall Arrest Systems</i>; and 437-003-0502, <i>Personal Fall Restraint Systems</i>.</p>

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 remove the bottom of a 55-gallon drum that contains traces of motor oil. His only PPE is a pair of synthetic gloves. The outcome: The drum explodes and the worker receives severe burns on his face and hands.

An effective PPE hazard assessment would produce 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, which could explode. Do not cut containers that may have held combustibles 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: dry, clean 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



General industry employers: After you do a hazard assessment, document it.

Your document 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 the hazard assessment
- The name of the person certifying the hazard assessment was completed
- The date of the hazard assessment

Your document can be as simple as this one.

PPE hazard assessment certification

Workplace evaluated: _____

Person certifying the evaluation: _____

Hazard assessment date: _____

There is a hazard assessment form on our website that you can download and use to do your own hazard assessment. You can use this hazard assessment and certification form to do your own hazard assessment. Or type http://www.orosha.org/forms/hazard_assessment_form.docx in your browser.

Construction industry and agricultural employers do not have to document their hazard assessments.

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.



A Division of the
Department of Consumer
and Business Services

Services

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

Appeals

503-947-7426; 800-922-2689; admin.web@state.or.us

- 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.

Conferences

**503-378-3272; 888-292-5247, Option 1;
oregon.conferences@state.or.us**

- Co-hosts conferences throughout Oregon that enable employees and employers to learn and share ideas with local and nationally recognized safety and health professionals.

Consultative Services

503-378-3272; 800-922-2689; consult.web@state.or.us

- 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).

Enforcement

503-378-3272; 800-922-2689; enforce.web@state.or.us

- 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.

Public Education

**503-947-7443; 888-292-5247, Option 2;
ed.web@state.or.us**

- Provides workshops and materials covering management of basic safety and health programs, safety committees, accident investigation, technical topics, and job safety analysis.

Standards and Technical Resources

503-378-3272; 800-922-2689; tech.web@state.or.us

- 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.

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

Salem Central Office

350 Winter St. NE, Rm. 430
Salem, OR 97301-3882

Phone: 503-378-3272

Toll-free: 800-922-2689

Fax: 503-947-7461

en Español: 800-843-8086

Website: www.orosha.org

Bend

Red Oaks Square

1230 NE Third St., Ste. A-115
Bend, OR 97701-4374

541-388-6066

Consultation: 541-388-6068

Eugene

1140 Willagillespie, Ste. 42
Eugene, OR 97401-2101

541-686-7562

Consultation: 541-686-7913

Medford

1840 Barnett Road, Ste. 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

1750 NW Naito Parkway, Ste. 112
Portland, OR 97209-2533
503-229-5910

Consultation: 503-229-6193

Salem

1340 Tandem Ave. NE, Ste. 160
Salem, OR 97303
503-378-3274

Consultation: 503-373-7819

