



# OSHA Top 10

How to avoid the most  
frequently cited violations





# OSHA Citations

*They're rampant, they hide in plain sight, and they have potentially dire consequences for your people and your bottom line. Is your organization doing enough to avoid the most common Occupational Safety and Health Administration (OSHA) citations?*

No matter how much you know (or think you know) about the most common workplace violations out there, it's clear that organizations could use some help.

**In fiscal year 2023, OSHA issued approximately 30,000 citations combined in the following categories<sup>1</sup>:**

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	number of citations
<b>Fall Protection – General Requirements</b> (1926.501)	<b>7,271</b>
<b>Hazard Communication</b> (1910.1200)	<b>3,123</b>
<b>Ladders</b> (1926.1053)	<b>2,978</b>
<b>Scaffolding</b> (1926.451)	<b>2,859</b>
<b>Powered Industrial Trucks</b> (1910.178)	<b>2,561</b>
<b>Lockout/Tagout</b> (1910.147)	<b>2,554</b>
<b>Respiratory Protection</b> (1910.134)	<b>2,481</b>
<b>Fall Protection – Training Requirements</b> (1926.503)	<b>2,112</b>
<b>PPE – Eye and Face Protection</b> (1926.102)	<b>2,079</b>
<b>Machine Guarding</b> (1910.212)	<b>1,644</b>

<sup>1</sup> <https://www.osha.gov/top10citedstandards>





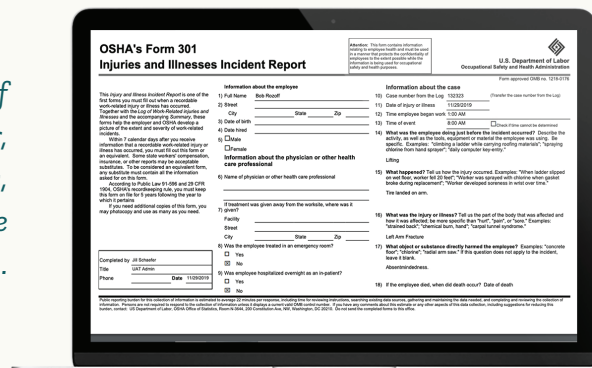
This list has remained largely unchanged for a decade. The reality is undeniable: many environment, safety, and health professionals are failing to adequately recognize and mitigate the greatest sources of workforce risk.

Every year, thousands of preventable incidents occur, causing needless injuries, illnesses, and—in some cases—deaths. From OSHA penalties to workers compensation claims to legal, operational, and reputational costs, businesses pay a significant toll.

Don't let your employees or your organization become statistics. In this resource, you'll learn how to avoid the 10 most frequently cited OSHA standards, one by one. The following pages contain explanations of each hazard, along with warning signs to look out for and prevention checklists you can use to improve compliance and minimize losses.

But before we begin, let's take a closer look at what's at stake—the price your organization pays when these hazards go unaddressed.

*Every year, thousands of preventable incidents occur, causing needless injuries, illnesses, and—in some cases—deaths.*





# The Cost of an OSHA Violation

OSHA penalties can exceed **\$16,131 per violation** and as much per day for every day the issue hasn't been fixed by OSHA's deadline.



The fine for a willful or **repeated violation can be 10 times as much.**

In 2024, the maximum penalty for such a violation is **\$161,323**.<sup>2</sup>

## Examples of indirect workplace hazards expenses

- ◆ workers' compensation claims from people who have experienced injuries and illnesses
- ◆ lost productivity during and after an incident
- ◆ lowered workforce morale due to fear and uncertainty around risk areas
- ◆ hours of labor spent identifying and fixing the issue
- ◆ expenses of cleaning and replacing equipment that's out-of-date, damaged, or broken
- ◆ legal and compliance fees
- ◆ negative publicity and reputational damage

*And those are just the direct costs. Organizations that don't adequately address common workplace hazards can expect to pay hundreds of thousands—even millions—in indirect expenses.*

Of course, the true costs of a safety violation are incalculable. No one can put a number on an employee's life. Suffice it to say, it's in your organization's best interest to bring your annual number of injuries and illnesses to zero.

Fortunately, avoiding an OSHA citation isn't as complex or cost-intensive as many people think. Small steps can save you 6 or 7 figures—or even save someone's life.

Read on to learn about the 10 most common OSHA violations and what you can do today to reduce their chances of happening in your workplace.

<sup>2</sup> <https://www.osha.gov/penalties>





CAUTION  
WET FLOOR

## Fall Protection

### General Requirements and Training Requirements

#### The OSHA Standard

**OSHA definition:** “Falls are among the most common causes of serious work-related injuries and deaths. Employers must set up the workplace to prevent employees from falling off of overhead platforms, elevated work stations, or into holes in the floor and walls.”<sup>3</sup>

**Simple definition:** Slips, trips, and falls are the #1 reason employees get hurt or killed at work. OSHA expects employers to protect workers from falls, but falls keep happening nonetheless. Organizations just aren’t doing enough to prevent falls, and workers aren’t taking the issue seriously enough.

In fact, falls are such a big deal that they occupy not one, but two spots on the OSHA Top 10 list. Combined, violations of these two standards accounted for nearly 9,000 OSHA citations in 2023—about 32% of all violations. And OSHA estimates that falls account for approximately 36% of all fatal injuries.<sup>4</sup>

#### To protect workers from falls, employers must do things such as the following:

- ◆ eliminate any known dangers in the workplace
- ◆ keep floors as clean and dry as possible
- ◆ cover floor holes workers can fall into
- ◆ provide guardrails and toe-boards around open-sided platforms, floors, and runways
- ◆ when required, provide other means of fall protection, including safety harnesses, nets, and railings
- ◆ provide workers with personal protective equipment to at no cost
- ◆ train workers about fall hazards

<sup>3</sup> <https://www.osha.gov/SLTC/fallprotection/>

<sup>4</sup> <https://ehsdailyadvisor.blr.com/2019/05/oshas-fatal-four-leading-causes-of-fatalities-in-the-workplace/>

## Why Violations Happen

Fall violations are common because dangerous and life-threatening falls have so many causes. Here are just a few:

- ◆ wet surfaces
- ◆ uneven surfaces
- ◆ inadequate lighting
- ◆ ladders that have been improperly set up
- ◆ ladders with structural defects
- ◆ crowded workspaces
- ◆ dangerous weather conditions, e.g. snow and wind

Countless falls can be attributed to human error. People use ladders incorrectly, rush around on elevated platforms, run up or down the stairs, lose sight of their footing, and so on.

Sometimes, falls are unavoidable, but they become far more dangerous than necessary—or even deadly—because fall protection precautions haven't been taken. Open holes haven't been covered, guardrails aren't installed, or a worker neglected to wear a helmet or fall protection, arrest, or restraint system.

Finally, as with so many OSHA violations, one leading cause of fall protection citations is inadequate training.

## Signs You're at Risk

- ◆ **You work in a high-risk industry:** Construction professionals are at higher-than-average risk for falls.
- ◆ **Workers frequently use ladders or work at heights:** Any time a worker is elevated off the ground, fall risk increases.
- ◆ **People are working in wet conditions:** If it's raining or just rained, or if people are working around liquid substances such as oils and paints, the potential for slips and falls increases.<sup>5</sup>
- ◆ **The workplace is cluttered, dirty, or disorganized:** OSHA identifies "good housekeeping" as a key factor in preventing slips, trips, and falls.<sup>6</sup>
- ◆ **You don't have personal fall protection, arrest, or restraint systems ready when necessary:** In certain situations, OSHA requires employers to use fall prevention and mitigation systems, which may include features such as harnesses, nets, and anchors. OSHA specifies the use and measurements of these tools, as well as what situations call for them.



### Fall Protection Violation Prevention Checklist

- Have you found and eliminated all fall risks?
- Are you using passive engineering controls and fall restraint systems when necessary?
- Do you have fall arrest systems ready?
- Are you training workers on fall protection?

<sup>5</sup> <https://www.kpaonline.com/roles/ehs/what-oshas-walking-working-surfaces-rules-really-mean-for-employers/>

<sup>6</sup> <https://www.osha.gov/dts/maritime/sltc/ships/housekeeping/intro.html>

# Hazard Communication

## The OSHA Standard

**OSHA definition:** "OSHA's Hazard Communication Standard (HCS) is based on a simple concept—that employees have both a need and a right to know the hazards and identities of the chemicals they are exposed to when working. They also need to know what protective measures are available to prevent adverse effects from occurring. OSHA designed the HCS to provide employees with the information they need to know."<sup>7</sup>

**Simple definition:** The HCS is the way you're supposed to inform your employees about dangerous chemicals in the workplace. It's a set of rules that covers labeling and tracking chemicals, as well as employee training on chemicals.

## Substances that fall under the HCS include...

- ◆ acids
- ◆ asbestos
- ◆ disinfectants
- ◆ glues
- ◆ lead, mercury, and other heavy metals
- ◆ paints
- ◆ pesticides
- ◆ petroleum products
- ◆ solvents
- ... and many more.

In fact, according to OSHA, "[m]ost chemicals used in the workplace have some hazard potential, and thus will be covered by the rule." For a full index of chemicals overseen by OSHA, visit [www.osha.gov/chemicaldata/](https://www.osha.gov/chemicaldata/).

<sup>7</sup> <https://www.osha.gov/Publications/OSHA3111.html>



Under the HCS, the following needs to be in place anywhere workers could be exposed to hazardous substances:

1. safety data sheets (SDS for short) for every chemical on the jobsite
2. a written hazard communication plan
3. comprehensive hazard communication training for all workers who may be exposed to hazardous chemicals

## Why Violations Happen

HCS violations usually happen because of the complexity and paperwork involved in compliance.

Organizations may fail to label their chemical containers properly, leave certain substances off of their chemical inventory lists, neglect to obtain SDS from manufacturers, or some combination of the above.

Many organizations get cited for **not maintaining a hazard communication plan**, or for failing to include necessary information in the written plan.

Sometimes, gaps in training can lead to violations. If not all workers have been trained, or if the training courses are incomplete or out of date, the organization can expect trouble from OSHA.

## Signs You're at Risk

- ◆ **You work with chemicals:** If chemicals are ever in your workplace, you could be at risk of an HCS violation.
- ◆ **You work with a lot of chemicals:** The more chemicals present, and the more those chemicals are used in the course of work, the greater the risk the organization faces. Industries with high numbers of incidents include

metal fabrication, machinery manufacturing, auto repair, construction, and painting.

- ◆ **Your written program is lacking:** If you have a simplistic HCS communication plan, or no plan at all, you're at risk of a violation.
- ◆ **Your SDS database is in bad shape:** If you aren't maintaining and updating your datasheets, you're at risk. If you don't know if your SDS information is accurate, you're at serious risk.



## HCS Violation Prevention Checklist

- Is a written copy of the updated Hazard Communication Program available to all employees?
- Do all employees or contractors have access to an SDS for every chemical on-site?
- Is there a system in place to inform outside contractors about chemicals at your site?
- Do all employees receive the required hazard communication training?
- Do all primary chemical containers have required hazard labeling?
- Are all secondary chemical containers labeled?



# Ladders

## The OSHA Standard

**OSHA definition:** "Working on and around stairways and ladders is hazardous. Stairways and ladders are major sources of injuries and fatalities among construction workers for example, and many of the injuries are serious enough to require time off the job. OSHA rules apply to all stairways and ladders used in construction, alteration, repair, painting, decorating and demolition of worksites covered by OSHA's construction safety and health standards."<sup>8</sup>

**Simple definition:** Ladders are dangerous. OSHA has specific rules about using ladders and working near ladders, as well as how ladders should be designed.

**In general, there are three categories of ladders used in the workplace:**

**1. stepladders;** **2. portable ladders**, including self-supporting (foldout) ladders and non-self-supporting (leaning) ladders; and **3. fixed ladders**. OSHA has general rules that apply to all ladders, as well as specific regulations for each kind of ladder. Rules cover issues such as the following:

- ◆ how much weight a ladder can bear
- ◆ the angle and position of a ladder
- ◆ the spacing and design of ladder rungs, cleats, or steps
- ◆ how to use two or more ladders together to achieve additional height
- ◆ ladder care and maintenance

<sup>8</sup> <https://www.osha.gov/Publications/ladders/osha3124.html>

## Why Violations Happen

Most ladder-related injuries and deaths are falls. Perhaps a worker slips on a wet rung of a fixed ladder, erroneously stands on the top rung of a step ladder and loses their balance, or comes crashing down with a poorly-supported portable ladder.

In fact, **many OSHA violations related to ladders come down to simple misuse and mismeasurement.** Oftentimes, it's unintentional. Other times, it's willful—a worker or supervisor choosing to ignore basic safety precautions because they're in a rush or believe the rules are unnecessary.

One of the most common issues is **side rail height.** Keep in mind that when a portable ladder is used to access an area out of reach, the side rails must extend at least three feet above the upper landing surface.

Another common violation is **using the top of a stepladder as a step.** No worker should ever sit, stand, or climb on the top platform of a stepladder.

Violations also happen when workers **use ladders for unintended purposes,** such as scaffolding, bracing, or as a work platform.

Finally, many violations involve the **use of ladders with structural defects.** A cracked, bent, rusty, or broken ladder is too hazardous to use. Workers should also never use a ladder built without proper support or grips, nor any ladder that is wet, oily, or greasy.

## Signs You're at Risk

- ◆ **You work in a high-risk industry:** Construction professionals—especially roofing, framing, siding, and painting contractors—are at higher-than-average risk for falls and other ladder-related incidents.

- ◆ **People are cutting corners:** The pressure to get the job done as fast and cheaply as possible can compel workers to ignore basic ladder safety and overlook issues on the worksite.
- ◆ **Workers don't have enough ladders available:** If there are few high-quality ladders around, workers may rely on shoddy equipment and makeshift solutions.
- ◆ **People are working in wet conditions:** If you're using ladders in an outdoor environment where it's raining or just rained, or if people are working around liquid substances such as oils and paints, the potential for slips and falls increases.



## Ladder Violation Prevention Checklist

- Are you following all labels and markings on the ladders you use?
- Are you inspecting every ladder before use?
- Are ladders built properly?
- Can ladders support the necessary weight?
- Are all ladders dry?
- Are ladders completely secured before use?
- Are all workers trained on safe ladder use?





# Scaffolding

## The OSHA Standard

**OSHA definition:** OSHA's scaffolding rules "[aim] to protect workers using scaffolding in construction work. Scaffolding hazards continue to rank high on the list of the most frequently cited standards in the construction industry. Scaffold-related fatalities account for a significant number of fatalities in the construction workplace."<sup>9</sup>

**Simple definition:** A scaffold is a temporary structure that allows people to work in areas that are high off the ground or otherwise inaccessible. OSHA's scaffolding standards lay out safe and proper methods for scaffolding used in construction jobs.

### There are three types of scaffolds commonly used:

- ◆ **Supported scaffolds** consist of one or more platforms held up by rigid structural elements such as beams, brackets, poles, legs, or frames.
- ◆ **Suspended scaffolds** are platforms raised by non-rigid means, such as ropes or cables.
- ◆ **Aerial lifts** are elevating devices mounted to vehicles. Examples include extendable boom platforms, aerial ladders, and vertical towers.

OSHA's scaffolding standard covers each of these kinds of scaffolds, as well as ladders, stilts, protection from falling objects, weather conditions, and other related hazards. The standard is extensive and detailed, specifying everything from fall protection measures to guardrail height to inspections and training.

<sup>9</sup> <https://www.osha.gov/Publications/OSHA3150/osha3150.html>



## Why Violations Happen

Scaffolding violations are common because scaffolds are standard construction equipment. The majority (65%) of construction projects involve scaffolds, according to the Bureau of Labor Statistics.<sup>10</sup> Millions of construction workers across the US work on scaffolds every year.

The BLS estimates that 3 issues account for over 70% of all scaffolding accidents:

- ◆ **Planking giving way** when equipment is defective, damaged, poorly maintained, or incorrectly assembled
- ◆ **Slips and trips** due to slippery surfaces, missing protective measures (such as guardrails), and/or inadequate training
- ◆ **Falling objects**

Overall, most scaffolding violations are the result of faulty equipment, dangerous environmental conditions, improper training, or a combination thereof.

## Signs You're at Risk

- ◆ **You work in construction:** Scaffolds are commonplace in the construction industry. Every time a worker needs to be elevated, there's risk involved.
- ◆ **Your equipment has been in use for a long time:** As discussed above, faulty and badly-maintained equipment is a leading cause of scaffolding accidents.
- ◆ **Tools and/or materials on the worksite aren't secured:** Any object resting on or above a scaffold can fall and become deadly.
- ◆ **The weather's bad:** Scaffolding is riskier during storms and periods of high wind, as well as immediately after rain or snowfall. Precipitation creates slippery surfaces, increasing the danger of slips and falls.

<sup>10</sup> <https://www.osha.gov/SLTC/scaffolding/construction.html>

- ◆ **Your workforce hasn't been trained properly or consistently:** Every worker who works on a scaffold needs to be able to demonstrate knowledge of safe conduct.
- ◆ **The wrong person (or no one) is in charge:** OSHA specifies that a "competent person" must be on hand to a) determine whether scaffolds are safe to use, b) direct others in erecting and dismantling scaffolds, and c) conduct training and inspections.



## Scaffolding Violation Prevention Checklist

- Are the right fall protection and/or fall arrest systems in place?
- Are guardrails at the proper height?
- Is crossbracing at the proper height?
- Are midrails installed correctly?
- Are footings strong enough?
- Are platforms fully planked or decked?
- Are scaffolds completely supported?
- Can scaffolds bear the necessary weight?
- Have all employees been trained on proper scaffolding use?
- Are inspections conducted as often as necessary?

## Powered Industrial Trucks

**OSHA definition:** "Powered industrial trucks, commonly called forklifts or lift trucks, are used in many industries, primarily to move materials. They can be used to move, raise, lower, or remove large objects or a number of smaller objects on pallets or in boxes, crates, or other containers.

The hazards commonly associated with powered industrial trucks vary depending on the vehicle type and the workplace where the truck is used. Each type of truck presents different operating hazards. For example, a sit-down, counterbalanced high lift rider truck is more likely than a motorized hand truck to be involved in a falling load accident, because the sit-down rider truck can lift a load much higher than a hand truck. Workplace conditions also present different hazards. For example, retail establishments often face greater challenges than other worksites in maintaining pedestrian safety."<sup>11</sup>

**Simple definition:** Countless businesses rely on forklifts, which OSHA likes to call "powered industrial trucks," to move large/heavy objects. However, the things that make forklifts useful also make them dangerous. Loads can fall and crush people. Forklifts can tip over, injuring drivers and workers nearby. Pedestrians can get hit, which is especially common in workplaces where a lot of people are moving around on foot.

### The OSHA Standard

<sup>11</sup> <https://www.osha.gov/SLTC/etools/pit/index.html>

### OSHA's forklift rules cover issues such as the following:

- ◆ the maximum weight a forklift can safely carry at one time
- ◆ how a load should be balanced on the forklift
- ◆ how materials should be raised and lowered via forklift
- ◆ forklift operator training
- ◆ safe speeds for driving a forklift
- ◆ how to safely use a forklift around pedestrians
- ◆ how to use forklifts to safely transport hazardous materials
- ◆ how to use forklifts in and around docks and other loading zones

For OSHA's full list of standards, visit [www.osha.gov/SLTC/poweredinustrialtrucks/standards.html](http://www.osha.gov/SLTC/poweredinustrialtrucks/standards.html).

### Why Violations Happen

There are two primary kinds of forklift-related accidents.

**The first is when forklifts tip over.** Often, this is due to balancing issues. Other times, it happens when forklifts are driven too fast—the forklift turns too quickly, or hits an obstacle, and the operator loses control.

**The second leading cause of forklift violations are pedestrian accidents.** Perhaps a forklift operator doesn't see a pedestrian, or a pedestrian isn't paying attention and walks in front of a forklift. Sometimes, a load falls or a forklift tips over and strikes a bystander. Other times, pedestrians may be injured or killed by a forklift falling off a loading dock, or when they themselves fall from an elevated pallet or tine (the "arm" of a forklift).

**Keep in mind that it's illegal for anyone under 18 years old to operate a forklift.**

### Signs You're at Risk

- ◆ **You work in a high-risk industry:** Retail and warehousing workers are particularly prone to forklift safety incidents.
- ◆ **Your employees aren't trained or certified:** All forklift operators must undergo training and certification. Everyone, regardless of whether they operate forklifts, must be trained on forklift safety procedures—how to keep themselves and others safe when forklifts are in use.
- ◆ **Forklift operators are driving recklessly:** A forklift driver needs to wear their seatbelt and observe speed limits at all times.
- ◆ **Forklifts aren't being inspected on a regular basis:** Every forklift should be carefully inspected and maintained between uses.



### Forklift Violation Prevention Checklist

- Are all forklift operators trained and certified?
- Have all employees taken forklift safety training?
- Do all forklift drivers wear safety belts when vehicles are in operation?
- Do forklift drivers watch for pedestrians and observe speed limits?
- Do forklift drivers use their horns when necessary?
- Are forklifts inspected before use?
- Are forklift operating environments adequately lit?
- Are you taking every precaution to avoid falling loads?



## Lockout/Tagout

### The OSHA Standard

**OSHA definition:** "The OSHA standard for The Control of Hazardous Energy (Lockout/Tagout), Title 29 Code of Federal Regulations (CFR) Part 1910.147, addresses the practices and procedures necessary to disable machinery or equipment, thereby preventing the release of hazardous energy while employees perform servicing and maintenance activities. The standard outlines measures for controlling hazardous energies—electrical, mechanical, hydraulic, pneumatic, chemical, thermal, and other energy sources."<sup>12</sup>

**Simple definition:** Some machines can seriously injure or kill workers. These machines are dangerous because they release hazardous energy—in the form of electricity, steam, chemicals, or another kind of power.

Hazardous energy can be released whether the machine is being used or not. This is why it's important for dangerous machines to be completely shut off before servicing and maintenance. For example:

- ◆ A capacitor that hasn't been properly disconnected could electrocute someone trying to repair it.
- ◆ A hydraulic press that hasn't been de-energized could crush someone.
- ◆ A steam valve that hasn't been bled out could scald someone.

OSHA's Control of Hazardous Energy standard, usually called the "Lockout/Tagout" standard (or LOTO for short), outlines what workers should do to safely depower dangerous machines. One of the main steps of lockout/tagout is literally locking the machine in the "off" position and adding a tag with the name of the person who carries the key to the lock.

<sup>12</sup> [https://www.osha.gov/OshDoc/data\\_General\\_Facts/factsheet-lockout-tagout.pdf](https://www.osha.gov/OshDoc/data_General_Facts/factsheet-lockout-tagout.pdf)

## Why Violations Happen

Lockout/tagout violations frequently come down to **poor documentation**. Employers should have detailed, written procedures for every machine they have in use. Some organizations neglect to document certain pieces of equipment; other organizations lack written procedures entirely.

**Inadequate employee training** is another critical risk area. Training isn't just for workers who operate, service, or apply locks and tags to the machines. Any employee who works around dangerous equipment needs to undergo [some level of lockout/tagout training](#).

Some employers violate the standard by simply **failing to identify every source of hazardous energy** in their facilities. Others **use the wrong lockout/tagout devices**.

Still other employers don't recognize their lockout/tagout risks because they **don't perform regular audits**. OSHA requires organizations with dangerous machines to regularly inspect and test those machines, as well as to evaluate their lockout/tagout procedures.

Last, organizations sometimes fall short because they **don't follow all lockout/tagout steps in the correct order**. Typical minimum procedures require the following:

- |                                 |   |
|---------------------------------|---|
| 1. notify employees             | 4. attach the lockout device                                |
| 2. shut down equipment          | 5. release or restrain any energy stored within the machine |
| 3. isolate the source of energy | 6. verify the lockout                                       |

## Signs You're at Risk

- ◆ **You work with a lot of machines:** The more dangerous equipment you have in use, the higher your risk for a lockout/tagout violation.

- ◆ **Your equipment is old or high-maintenance:** If you're constantly servicing or fixing your machines, you'll need to ensure continuous lockout/tagout compliance.
- ◆ **Your workforce hasn't been trained properly or consistently:** Workers involved in lockout/tagout procedures need specific training. The same goes for workers who perform servicing and maintenance. On top of that, everyone who works around dangerous machines should be aware of basic lockout/tagout procedures.
- ◆ **You can't remember your last lockout/tagout audit:** If it's been over a year since you evaluated your equipment and procedures, you could be in trouble.



## Lockout/Tagout Violation Prevention Checklist

- Have you identified every hazardous machine in your facility or facilities?
- Do you have written lockout/tagout procedures in place for every machine?
- Are your employees following proper maintenance and service protocol?
- Have you ensured any equipment, machinery, or parts of machinery won't unexpectedly release stored energy automatically, or due to human error?
- Have you eliminated all potential for injury (burns, laceration, contusions, punctures, electrocution, crushing, etc.) or death from the hazards while completing the maintenance tasks?
- Do employees have the correct locks and/or tags?

# Respiratory Protection

## The OSHA Standard

**OSHA definition:** "In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering control measures (for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials). When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used pursuant to this section."<sup>13</sup>

**Simple definition:** Not all air is safe to breathe. The oxygen in a certain environment may contain hazardous fumes, dust, or other contaminants.

Common airborne contaminants include particulate matter (e.g. silica dust), smoke, gases, mists, vapors, and aerosols. These and other contaminants can cause short- and long-term health problems, such as asthma, bronchitis, emphysema, impaired thinking, decreased lung capacity, loss of consciousness, and cancer.

OSHA's respiratory protection standard outlines how organizations should minimize worker exposure to hazardous air. First, the standard requires employers to assess and minimize airborne hazards if possible. But if controlling the environment isn't possible or doesn't provide adequate protection, employers must provide their workers with respiratory devices (usually called "respirators"). The standard lays out which respirators to use—and how to use those respirators—in various situations, along with maintenance, inspection, and medical follow-up procedures.

<sup>13</sup> <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134>



## Which Kind of Respirator Is Required?

Respirators fall into two main categories:

**Air-purifying:** Use filters or sorbents to remove harmful substances from the air. Range from simple disposable masks to sophisticated devices. These must not be used in oxygen-deficient atmospheres or in atmospheres that are dangerous to life or health. Best used on a short-term basis.

**Atmosphere-supplying:** Provide breathable air from a clean air source. This category includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units. These can be worn for extended periods of time.

All respirators must fit properly and must not impair the worker's ability to see, hear, communicate, and move to perform the job safely.

## Why Violations Happen

Many violations of OSHA's respiratory protection standard happen when **organizations fail to establish respiratory protection programs.**

Some **organizations fail to perform required fit testing.**

Another common reason for OSHA citations are **inadequate medical evaluations.**

Many other violations occur due to **inadequate training.**

## Signs You're at Risk

- ◆ **You work in a high-risk industry:** Construction workers, miners, painters, fabricators, and auto mechanics are exposed to higher-than-average levels of contaminated air.

- ◆ **You haven't checked your equipment recently:** Respirators need ongoing maintenance and testing. When a device is no longer operational or safe to use, it should be replaced.
- ◆ **Your exposed employees work long hours:** The risks related to toxic air exposure increase with every hour on the job. Your workers should be taking breaks or rotating out frequently.
- ◆ **Your workforce hasn't been trained properly or consistently:** Anyone who could be exposed to contaminated air needs to know how to use a respirator.



## Respiratory Protection Violation Prevention Checklist

- Do you know if OSHA's respiratory protection standards apply to your workplace?
- Do you have ALL required respiratory procedures documented?
- Do employees have access to adequate medical treatment?
- Are all employees trained on respirator procedures?
- Are the right respirators available?
- Are you testing the equipment properly?
- Are you replacing respirators that no longer function?
- Are you regularly evaluating your respiratory protection program?
- Are you documenting everything?



## Personal Protective Equipment – Eye and Face Protection

### The OSHA Standard

**OSHA definition:** “Thousands of people are blinded each year from work-related eye injuries that could have been prevented with the proper selection and use of eye and face protection.

OSHA requires employers to ensure the safety of all employees in the work environment. Eye and face protection must be provided whenever necessary to protect against chemical, environmental, radiological, or mechanical irritants and hazards.

Personal protective equipment, commonly referred to as ‘PPE,’ is equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards.”<sup>14 15</sup>

**Simple definition:** Personal protective equipment (“PPE” for short) is exactly what it sounds like: equipment people wear on their bodies to protect themselves. OSHA requires workers to wear PPE whenever they could become injured or sick by not wearing it.

There are many different kinds of PPE, with each piece designed for a specific job or working condition. Common examples of PPE include hard hats, safety glasses, goggles, face shields, gloves, steel-toed boots, respirators, earplugs, vests, coveralls, and other full body suits. PPE needs to fit comfortably and properly, or else it may not work as intended. It must be regularly inspected and maintained, and replaced when no longer functional. Employers must supply and pay for all PPE necessary to keep their employees safe.

<sup>14</sup> <https://www.osha.gov/SLTC/eyefaceprotection/index.html>

<sup>15</sup> <https://www.osha.gov/SLTC/personalprotectiveequipment/>

**Of all the body parts that PPE protects, the face and eyes are among the most vulnerable.** Many safety incidents involve a worker’s face or eyes getting struck by an object, injured by flying particles, burned by acids or chemicals, or exposed to light radiation.

## Why Violations Happen

**Simply put, eye and face protection violations occur because the eyes and face are often under-protected and overexposed.**

Workers and their employers frequently underestimate the risk of eye and face injuries. Employees may neglect to wear eye and face protection or remove their PPE before it is safe to do so. Common complaints are that the PPE doesn’t fit comfortably, is too hot, or makes the wearer look unattractive. For goggles and safety glasses in particular, a major problem is the equipment fogging up<sup>16</sup>, causing the wearer to periodically remove it and clean off moisture.

One of the leading reasons for PPE violations is inaccessibility—the right equipment isn’t readily available when people need it. Sometimes, violations occur because the employer has failed to provide the necessary PPE. Now and then, violations occur because PPE hasn’t been stored or maintained properly.

Then, as usual, there’s the issue of inadequate training. Workers need to know when and how to use PPE; how to put it on, adjust it, and take it off; and how to properly test, store, maintain, and dispose of the equipment.

## Signs You’re at Risk

- ◆ **You work in a high-risk industry:** PPE violations happen in myriad different environments, but they’re perhaps most common in the construction, manufacturing, and repair industries.
- ◆ **You haven’t conducted a hazard assessment:** OSHA requires

employers to identify any and all hazards that are present or may be present in the workplace.

- ◆ **You work with chemicals or other hazardous substances:** Chemicals are a common but under-recognized source of injury and illness risk, especially when it comes to the eyes and face.
- ◆ **Your PPE is in bad shape:** If you’re relying on old, poorly-maintained, and poorly-stored equipment, there’s a good chance you’re putting your workforce in danger.

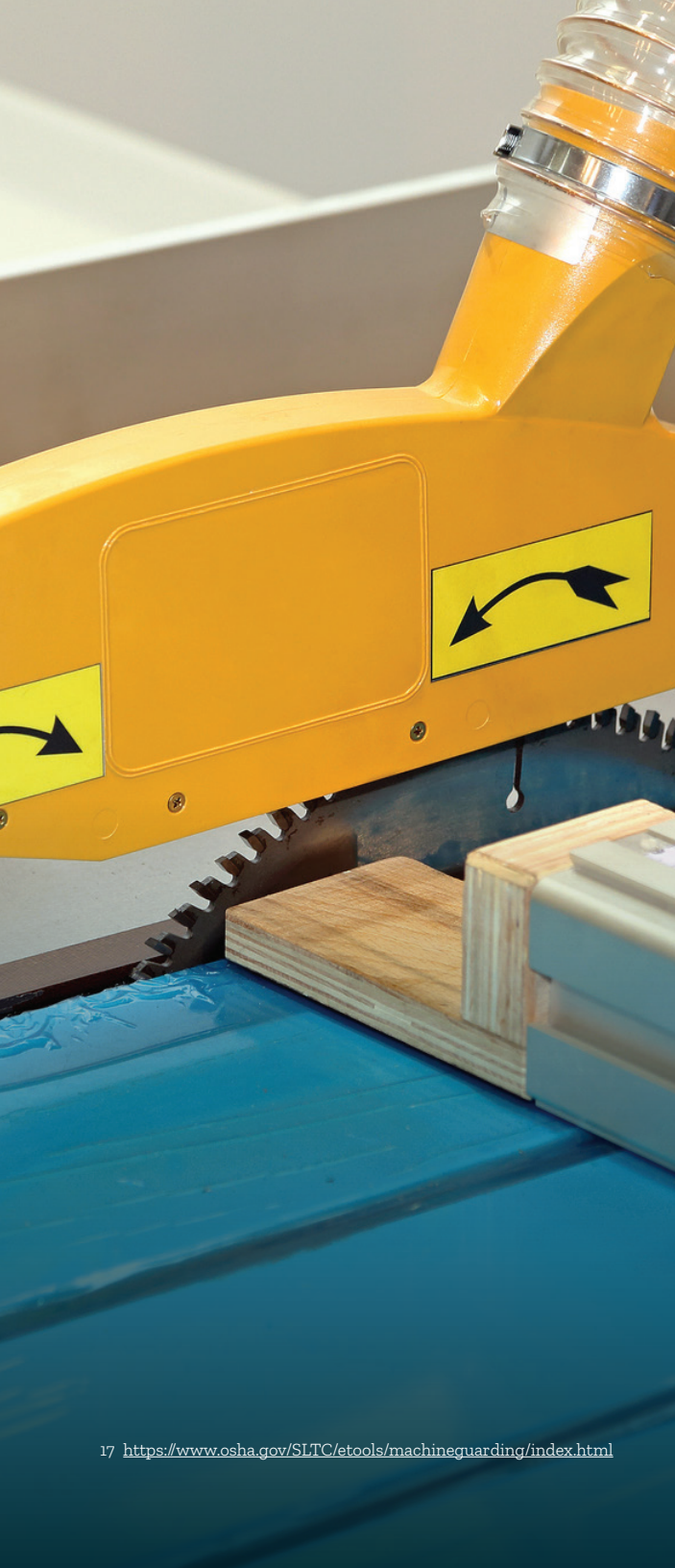


## PPE Violation Prevention Checklist

- Does your facility have a completed and signed hazard assessment?
- Is all PPE required by company policy or the hazard assessment being provided and used by employees?
- Is all PPE at your facility in good condition and properly stored?
- Do all employees wear the appropriate footwear for their work area?
- Are all employees wearing safety glasses, safety goggles, or face shields when performing eye-threatening activities?
- Are “Eye Protection Required” signs posted in areas where eye-threatening activity is present?
- Is each employee working with hazardous chemicals protected with an appropriate long sleeve uniform and/or protective apron?
- Are all employees wearing the proper gloves for the job they are performing?
- If required, are dust masks provided?

<sup>16</sup> <https://www.hexarmor.com/posts/workplace-eye-injury-statistics>





## Machine Guarding

### The OSHA Standard

**OSHA definition:** "Employee exposure to unguarded or inadequately guarded machines is prevalent in many workplaces. Consequently, workers who operate and maintain machinery suffer approximately 18,000 amputations, lacerations, crushing injuries, abrasions, and over 800 deaths per year. Amputation is one of the most severe and crippling types of injuries in the occupational workplace, and often results in permanent disability."<sup>17</sup>

**Simple definition:** Industrial equipment is dangerous. Machines such as power saws, shears, guillotine cutters, presses, milling machines, fans, conveyor belts, palletisers and revolving drums can slice, crush, and tear off workers' body parts. Sometimes, hazards are caused by nip points (also called pinch points)—points where one or more parts (such as gears) rotate. In other cases, machines generate sparks or flying chips that can injure workers.

For these reasons, OSHA requires that certain pieces of equipment have specific protection mechanisms in place. This is what's known as machine guarding. Examples of machine guarding include barriers, light curtains, and two-hand trips.

Machine guarding typically applies to the point of operation—that is, the location on or near the machine where work is performed. However, many machines need to be safeguarded at multiple points. Additionally, there are plenty of instances where OSHA requires or recommends secondary controls, such as alarms and fences.

<sup>17</sup> <https://www.osha.gov/SLTC/etools/machineguarding/index.html>

## Why Violations Happen

Why do so many machine guarding violations occur? **One reason is that not all equipment has required safety controls in place.** While most single-purpose machines provide point-of-operation and power transmission safeguards as standard equipment, not all machines in use have built-in safeguards provided by the manufacturer.

Sometimes, where there aren't built-in safeguards, users will construct and design their own safeguards. Unfortunately, user-built guards have disadvantages—they may be poorly designed or built, or may not conform well to the configuration and function of the machine.

**Regardless of the type of guard in place, countless machine guarding accidents result from human error.** Workers rush or become careless and overlook safety precautions. Sometimes, people make the wrong decisions in moments of panic—a supervisor may shut power off while someone is still using a machine, for instance, or an operator may press the wrong button. Stress can cause or exacerbate these issues.

Last, as with virtually all OSHA violations, **inadequate training is a leading cause of accidents.**

## Signs You're at Risk

- ◆ **You work with numerous industrial machines:** The more pieces of dangerous equipment you have around, the higher your risk of a machine guarding-related accident or violation.
- ◆ **You have one or more decades-old machines still in operation:** Equipment manufactured in the 1990s, 80s, 70s, or earlier isn't always in line with OSHA's rules and standards. (Note that newer equipment isn't necessarily risk-free, however.)
- ◆ **You haven't inspected your machines recently:** Organizations need to conduct frequent risk assessments and surveys of their equipment.

- ◆ **People are working close to hazardous machines:** One basic form of machine guarding is called "guarding by location." According to OSHA, this "involves positioning or designing a machine so that the hazardous parts are away from areas where employees work or walk, or alternatively, installing enclosure walls or fences that restrict access to machines."
- ◆ **Your people aren't well-trained—or you can't prove that they are:** If you can't certify that every employee who works with hazardous machines has received the proper training, you're at significant risk of an accident or violation.

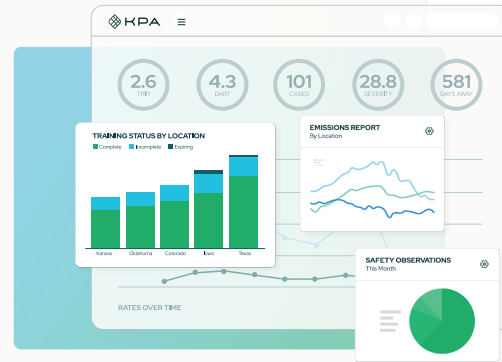


## Machine Guarding Violation Prevention Checklist

- Have you identified all machine-related injury risks?
- Do you have adequate guards in place on all machines?
- Is there evidence that any safeguards have been tampered with or removed?
- Are there guards in place for all hazardous parts of machines?
- Are you guarding against electrical hazards?
- Are you providing extra protection when necessary?
- Are you safeguarding workers against non-mechanical hazards?
- Can guards be removed safely?
- Have all operators undergone safeguarding training?
- Are you continually monitoring your equipment and employees?



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This resource contains only a basic overview of the most common OSHA violations and how to avoid them. To truly protect your workforce and bottom line, you'll need in-depth information—and not just about OSHA's top 10, but every potential hazard that exists in your organization. You'll also need to conduct a thorough evaluation of your facilities to identify current gaps and risk areas.

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