

An overview of common workplace hazards

Many of these hazards have the potential for serious injuries and fatalities or SIFs. Review the Fatal 10 (sidebar page 1) and Red-flag situations (sidebar page 2) to focus on preventing them. We can't always prevent these job tasks, but we can put good controls in place.

The Fatal 10

- Vehicle/equipment operation
- · Working at heights
- Workplace violence
- Machine hazards/lockout failures
- · Hazardous materials/
- · Electrical/arc flash hazards
- · Fire/explosion/hot work
- Confined spaces/trenching/ engulfment
- · Suspended loads
- · Struck by objects and

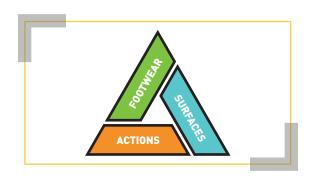
A confined space has limited openings for entry and exit and is an enclosed or partially enclosed space. For more information on the measures needed for confined space, see SAIF's confined space webpage (saif.com/confined).

Workplace hazards can come in many forms, posing risks to employees' health and safety. Identifying and addressing these hazards is essential for creating a safe work environment and ensuring regulatory compliance. This overview covers some of the most common workplace hazards. Hazards that can lead to a serious injury or fatality should be examined more closely. Find out more on the SIF page (saif.com/sif).

1. Work surface and walkway hazards

Work surface hazards

Uneven or damaged flooring, inadequate surface maintenance, and improper flooring materials can create slip, trip, and fall hazards. Working surfaces should be kept clean, free of obstructions, and properly maintained. Standing or working on unstable surfaces can lead to serious injuries.



Walkway hazards

Obstructed walkways, poor lighting, and clutter can contribute to trips and falls. Ensuring that walkways are clear, well-lit, and maintained is crucial for preventing accidents. Adequate signage and barriers should be used to alert employees to potential hazards.

Fall hazards

Working from a height of four feet or more can present a serious risk of falling and may require protective measures like guard rails or personal fall arrest systems.

Resources

Slip, trip and fall page (SAIF) (saif.com/falls)

Walking-working surfaces at a glance (Oregon OSHA) (bit.ly/3E5JQ5g)

2. Machinery hazards

Machinery hazards include moving parts, sharp edges, release of stored energy, and unquarded components. Employees can be exposed to entanglement, cutting, or crushing injuries if machinery is not properly guarded. Regular maintenance, the installation of safety guards, and training in proper machine use are essential for mitigating these risks.



Resources

Machine quarding at the point of operation (Oregon OSHA) (bit.ly/3TC4s8I)

Lockout/tagout page (SAIF) (saif.com/tagout)

3. Electrical hazards

Electrical hazards encompass exposed wiring, faulty equipment, and improper grounding. There is a higher risk when working near overhead power lines or digging near underground power lines, especially if the voltage levels are high. Risks include electrical shocks, burns, and fires. Ensuring that electrical systems are well-maintained, using appropriate personal protective equipment



(PPE), and following proper lockout/tagout procedures can help prevent many of these hazards. Employees should also be trained to recognize and report electrical hazards.

Resources

Electrical topic page (Oregon OSHA) (bit.ly/445H0aX)

Electrical safety page (SAIF) (saif.com/electrical)

4. Chemical hazards

Chemical hazards involve exposure to harmful substances such as acids, solvents, and toxic gases. These can cause health issues ranging from skin irritation to an acute exposure leading to death. Proper labeling, storage, and handling of chemicals are vital. Using appropriate PPE, following safety data sheets (SDS) information, and ensuring proper ventilation can mitigate these risks.



Resources

Hazard communication page (SAIF) (saif.com/ghs)

Hazard communication page (Oregon OSHA) (bit.ly/4iiPlfb)

5. Environmental hazards

Environmental hazards include factors such as high or low temperatures, inadequate ventilation, and noise pollution. Exposure to heat or cold can lead to heat stress or hypothermia, while poor ventilation can lead to illnesses from air that is unsafe to breathe. Noise pollution can cause hearing loss. Implementing climate control measures when possible, having adequate ventilation systems,



and noise reduction strategies are key to managing these risks.

Resources

Heat and cold stress page (SAIF) (saif.com/heatcoldstress)

Noise and hearing protection page (SAIF) (saif.com/noise)

Many of these hazards have the potential for serious injuries and fatalities or SIFs. Review the Fatal 10 (sidebar page 1) and Red-flag situations (sidebar page 2) to focus on preventing them. We can't always prevent these job tasks, but we can put good controls in place.

Red-flag situations

- Nonroutine work
- Stressors: physical, environmental, etc.
- Fatigue
- Production pressures
- Inadequate supervision and follow-through
- Working alone
- Inadequate operating procedures, training, and follow-up
- Poor equipment or task design
- New employees
- Lack of engineering controls

S1097A | SAIF 06.21

6. Unsafe work practices

Unsafe work practices are actions or behaviors that increase the risk of accidents or injuries. Examples include bypassing safety protocols, using defective equipment, or engaging in unsafe shortcuts. It's easy to blame the worker when they engage in unsafe work practices, but businesses should also look at the context surrounding the choice to work unsafely to ensure that



workers are equipped to make the safe choice. Establishing and enforcing safety procedures, conducting regular safety training, including accountability for following safety procedures, and fostering a culture of safety can help reduce these practices.

Resources

What leads to risk-taking behavior handout (SAIF) (saif.com/S1174)

Human and organizational performance handout (SAIF) (saif.com/hop)

7. Driving-related hazards

Driving-related hazards include risks associated with operating vehicles within the workplace or during work-related travel. These hazards can involve vehicle accidents, poor vehicle maintenance, and inadequate driver training. Ensuring vehicles are well-maintained, providing driver safety training, and enforcing safe driving practices help to minimize these risks.



Resources

Safe driving page (SAIF) (saif.com/safedriving)
Vehicles page (Oregon OSHA) (bit.ly/3RmF9Hv)

8. Ergonomics

Ergonomic hazards arise from poor workstation design, repetitive motions, and improper lifting techniques. These can lead to musculoskeletal disorders such as back pain and carpal tunnel syndrome. Designing workstations that promote proper posture, providing ergonomic tools, and encouraging regular breaks and job rotation help prevent ergonomic-related injuries.

Resources

Ergonomics page (SAIF) (saif.com/ergo)

Ergonomics page (Oregon OSHA) (bit.ly/4jezUFt)



In Oregon, safety committees must be trained in the basics of hazard identification. Learn more about safety committee requirements at saif.com/committees.

9. Workplace violence

Workplace violence includes physical assaults, threats, or abusive behavior. It can result from conflicts between employees, customers, vendors, or members of the public. Implementing a zero-tolerance policy for violence, providing conflict resolution training, and having a clear procedure for reporting and addressing incidents are critical for managing these risks.



Resources

Violence in the workplace page (SAIF) (saif.com/violence)

Violence in the workplace page (Oregon OSHA) (bit.ly/4jefWum)

Summary

Addressing workplace hazards requires a comprehensive approach that includes identifying risks, implementing preventive measures, and promoting a culture of safety. By focusing on work surface and walkway hazards, machinery hazards, electrical hazards, chemical hazards, environmental hazards, unsafe work practices, driving-related hazards, ergonomics, and workplace violence, organizations can enhance safety and protect employees from injury and harm. Regular reviews and updates to safety protocols, combined with ongoing training and vigilance, are essential for maintaining a safe and healthy work environment.

More info

Learn more about workplace hazards and how to prevent them at saif.com/hazardid.

ACTIVITY IDEAS

- Identify a hazard in your workplace and discuss how it's being addressed. Can the controls be improved?
- Do a walkaround inspection looking for these and other hazards. Are there hazards that keep happening? What can you do to prevent hazards from happening again?
- Use the hazard identification section of Oregon OSHA's Foundation for a safe workplace (bit.ly/3XH6esj) as a guide to examine your company's hazard identification and control procedures.