

Risk Insights Education

Emergency Eyewash Station Requirements

While the use of primary eye protection is already required in your workplace, accidents can still happen. It takes only one splash from a corrosive or caustic chemical and lack of an adequate emergency response system to cause permanent blindness.

It is easy to see that the cost of adhering to the Occupational Safety and Health Administration's (OSHA) emergency eyewash regulations is far less than the potential cost of losing an employee and paying workers' compensation benefits for years.

OSHA's Standard

According to OSHA, any workplace where employees' eyes could be exposed to harmful corrosive or caustic material is required to have suitable facilities for quick-drenching or flushing of the eyes. The standard specifies that these facilities must be within the work area and available for immediate emergency use. This applies to all businesses that fit the criteria regardless of size and number of employees.

A good way to determine whether you need to have an eyewash station at your facility is by examining the first aid information on any chemicals your employees work with, which can be found either on the label or on the Safety Data Sheet (SDS). If these instructions indicate that exposure of the substance to the eyes would require 15 minutes or more of flushing, you need an eyewash station. There is no OSHA threshold for quantity of corrosive material that triggers the requirement of an eyewash station—rather, the determining factor is the possible exposure of an employee to injury.

However, beyond requiring "suitable facilities," this standard is rather vague. Thus, the American National Standards Institute (ANSI) has publicized an emergency eyewash standard that further outlines what kinds of facilities are considered OSHA-compliant. OSHA specifically emphasizes that any equipment in compliance with ANSI requirements would meet the intent of the OSHA standard.

Determining whether you need to have an eyewash station at your facility starts with examining the first aid information on any chemicals your employees work with. This is located either on the label or on the SDS.

Eyewash Station Regulations

The following is a list of stipulations and requirements outlined by ANSI standard Z385.1, which is intended as a guideline for proper design, installation, use, and maintenance of eyewash equipment.

- Eyewash stations must be within a 10-second walk of wherever the hazard is, and it cannot be up or down stairs. This means that depending on the size of your facility and the number of hazards, you might need more than one eyewash station.
- If employees are working with exceptionally strong or dangerous materials where the consequences of a

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spill would be particularly harmful, the eyewash station should be installed immediately adjacent to the hazard.

- An injured person must be able to turn on and start the eyewash's water flow in no more than one second.
- Device must be able to be operated hands-free, if necessary, so the injured person can use it while also holding his or her eye(s) open.
- Eyewash must deliver a continuous flow at a rate of 0.4 gallons per minute for a minimum of 15 minutes.
- The water temperature delivered by the eyewash should be "tepid," or in other words, lukewarm. However, investigate the types of chemicals employees are working with and identify any that may have an accelerated reaction with warm water. In that case, consult a medical professional about the optimal temperature of the eyewash station.
- Employees must be appropriately trained in not only the location of the eyewash, but on its proper use. It is not enough to simply install the equipment, as employees may not know how or when to use it when an emergency actually arises.
- Perform regular maintenance on eyewash equipment. For compliance with the standard, it should be inspected at least annually and also be activated weekly to ensure proper operation.

Plumbed Eyewash Stations

Both portable and plumbed eyewash stations are acceptable to satisfy the OSHA standard. The only type of eyewash that is not adequate is a wall-mounted plastic eye flushing bottle, as it does not supply a 15-minute, continuous water flow.

Though plumbed eyewashes are acceptable, they require a bit more care to ensure they serve their function in the event of an emergency. They do have advantages, such as the unlimited water supply, durability and ability to also include an emergency shower in the case of full-body chemical exposure. However, if they are not properly maintained, they could do more harm than good. Since tap water is the source, failure to properly maintain these types of stations could cause buildup from pipes or standing water to be the rinsing agent. This could present a dangerous situation when working with highly reactive and volatile substances.

Because of these dangers, it is not enough to simply have an eyewash station on site. It is important—and vital to your employees' health—to clean the bowl and nozzles regularly, check the water pressure and run the water weekly to prevent pipe buildup. It is also a good idea to keep copies of these cleaning records to assure an OSHA inspector of your good faith efforts to comply. When a safety standard is vague—like the emergency eyewash standard, it is in everyone's best interest to do everything possible to guarantee compliance.

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Do you have additional questions? If so, we're here to help. Our team of property and casualty professionals has a host of compliance resources available to support your facility and employee safety initiatives. Please contact RAM Mutual Insurance Company at 218.879.3321 for further assistance.

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