

Emergency Eyewash Stations and Shower Equipment

Emergency washing facilities must be easily accessible, and provided in work areas where an exposure to harmful substances, or other materials, may cause burning or irritation to the worker's eyes or skin (Section 2.9 of the Occupational Health and Safety Act General Regulations). Conducting a risk assessment will help determine what type of emergency washing facilities are required.

Emergency Eyewash Stations

There are two types of eyewash stations, portable and plumbed.

Plumbed eyewash stations are permanently connected to a potable water source within the workplace where the water temperature can be controlled.

Portable options can be taken to work areas where plumbing is not an option. Portable eyewash units are pressurized, or gravity-fed, and are useful in the construction industry or for other outdoor job sites. Potable water, or an isotonic saline flushing solution, may be used in a non-plumbed eyewash unit. It is also recommended that employers provide workers with a proper fitting eye piece to assist with keeping the effected eye open while flushing.

Emergency Shower Equipment

Unlike a traditional showerhead, emergency showerheads are designed to activate in 1 second or less and ensure that water comes in contact with the operator's entire body and not just their head (often called deluge showers). The valve is usually activated by a pull handle and will remain open until it is intentionally turned off.



Emergency showers and eyewash fountains are required to be installed, tested, and maintained in accordance with the ANSI Standard Z358.1-14, American National Standard for Emergency Eyewash and Shower Equipment

When is an Emergency Eyewash Station or Shower Required?

Many work areas and specific tasks require the presence of eyewash facilities or emergency shower, including:

- high dust areas (in windy conditions or where grinding, sanding, or chipping may take place)
- chemical dispensing and mixing areas
- battery charging areas
- dipping operations
- Laboratories
- spraying operations
- chemical storage

Water should be between 16-38°C. Anything higher is harmful to the eyes and may enhance chemical reaction with the skin and eyes.

It should never take longer than 10 seconds to reach the nearest emergency station. The first 10 to 15 seconds after an exposure are crucial for proper treatment.

How can you help in an emergency situation?

If a worker is injured, remain calm and assist them to the nearest station. Assist the worker in rinsing or flushing the affected area for a minimum of 15 minutes. That time may be adjusted if the identity and properties of the chemical or substance are known. Safety Data Sheets (SDS) will provide information to help determine adequate flushing times and appropriate first aid treatment for hazardous materials. Seek medical attention immediately after first aid treatment.

Reduce the Risk

- Be sure workers wear the proper personal protective equipment for the job, including eye protection, appropriate clothing, footwear and gloves.
- Ensure all workers are trained in the proper use and location of emergency eyewash and shower equipment.
- Ensure workers are able to locate the SDS sheets and any first aid requirements for specific chemicals in the workplace.
- Based on the results of a risk assessment, select the appropriate emergency washing facilities for the workplace.
- Keep the pathway and area around the emergency washing facilities clear of obstructions.
- Portable eyewash units should be accessible and easy to locate in the event of an emergency.
- Post adequate signage to identify where the emergency washing facilities are located.
- Activate plumbed emergency shower and eyewash facilities weekly to clear stagnant water and microbial contaminants and ensure flushing fluid is available.
- Ensure eyewash stations are covered to prevent debris or buildup from falling into eyewash heads.
- Inspect emergency facilities annually in accordance to ANSI Standard Z358.1-14, American National Standard for Emergency Eyewash and Shower Equipment.

