Emergency Wash Stations Meeting Kit

What’s At Stake

Emergency shower and eyewash stations are essential safety features in any setting where dangerous chemicals are used. Any time a person comes in direct contact with a dangerous chemical, the response in the first 15 seconds after exposure is critical to preventing serious injury. While proper personal protective equipment (PPE) and process engineering can mitigate the risk of exposure, you still need to make sure your eyewash and safety showers will work if they need to be activated.

What’s the Danger

EMERGENCY WASH STATION REQUIREMENT

Emergency wash fixtures are required in the workplace if there is a reasonable risk that workers may be exposed to caustic chemicals or other hazardous substances. Inform all workers at risk of the location and purpose of the emergency wash stations and provide them with regular training on its use. Emergency wash fixtures are not substitutes for personal protective gear like safety eyewear, face shields, and protective clothing.

HOW TO PROTECT YOURSELF

CHEMICAL CONTAMINATION – HOW TO TREAT

The most effective step in treating chemical contamination of the eye or skin is immediate flushing or washing with potable water. Medical experts say that immediate access to an emergency wash station is critical. The chance of full recovery from chemical contamination of the eye is excellent, if the victim reaches an eyewash station within 10 to 15 seconds. Panic, pain, and obscured

vision will slow response time.

Proper flushing/washing takes time

The length of time and amount of flushing or washing is key to the successful treatment of the eye or skin. The minimum amount of time for flushing the eye is 15 minutes, although most medical experts say a full 20 to 30 minutes is best. It is important that the water pressure of the eyewash station be closely regulated because tender eye tissue can be easily damaged.

OBTAIN OPTIMAL BENEFIT FROM WASH STATIONS

1. **Place eyewash stations and safety showers in accessible locations:** They should be located in any work area where corrosives or other hazardous chemicals are used.
2. **Install correctly:** Stations vary and they have precise installation instructions to enable proper performance. This includes installation height, rate of fluid flow and spray pattern requirements.
3. **Never hang eyewash stations at an angle:** A crooked station can reduce the flow of flushing water.
4. **Do not block or hinder access to eyewash stations or safety showers:** Injured workers need to get to the station or shower quickly. Make sure nothing is blocking their way.
5. **Monitor eyewash flushing fluid temperatures:** Eyewash flushing fluid needs to be at a safe temperature that is not too hot or cold.
6. **Clean after every use:** Always completely clean, disinfect, rinse and dry eyewash stations thoroughly.
7. **Do not cover an eyewash station:** Never place additional plastic or any other type of makeshift cover over an eyewash station to keep dust and particles out.

BEST PRACTICES FOR MAINTAINING YOUR EMERGENCY SHOWER AND EYEWASH STATION:

1. **Provide training to all individuals who may be exposed to hazardous materials.** An eyewash and safety shower is only useful if you know where to find it and how to activate it.

Individuals who are exposed should know immediately where to go and how to activate the water supply to its maximum flow, as every second is critical when responding to an accident.

2. **Perform weekly and annual inspections.** The ANSI standard calls for a weekly activation of all plumbed eyewash and safety showers in order to confirm that flushing fluid is available. This practice also helps to avoid sedimentation and/or contamination near the head of the equipment. Along with this weekly flushing, all eyewash and safety showers must be inspected and re-certified on an annual basis to ensure conformance with ANSI's design specifications.
3. **Ensure that all stations are easily accessible.** This one is all about minimizing the time between exposure and treatment. Two rules of thumb to maintain accessibility are as follows:
   There should be a 16-inch radius from the head of the shower that is completely clear of any obstructions. A common mistake is using this space as storage. As a best practice, use floor tape to clearly delineate the area as well as a shower and eyewash sign. There should never be more than one door between an individual's workspace and the closest eyewash and safety shower.
4. **Complete a quarterly site walk and review dedicated to eyewash and safety showers.** Performing a thorough site walk will ensure that accessible eyewash and safety showers are provided in each location where exposure is possible, even as spaces change.

LOCATION, LOCATION, LOCATION

- Each unit should be located close to a hazard, easy to see and access, and work properly.
- Emergency shower fixtures must be within 55 feet of a potential hazard and must take no more than 10 seconds to reach.
- In addition, the path to the fixture must not be obstructed by debris or other hazards that may impede the path of the injured employee.
- The equipment must be on the same level the user is working

on. If there are doors between the hazard and the fixture, they must swing in the direction of travel.

- If the worker’s ability to walk or move might be impacted by the chemical exposure, the fixture should be placed closer to the worker.
- If highly corrosive chemicals are used, the drench shower or eyewash should be placed immediately adjacent to the hazard.
- If a potential chemical spill in an area is likely to affect multiple workers, a sufficient number of fixtures should be in place to prevent one worker from having to wait 15 minutes while another is drenched.
- Visibility is also a factor. The area around the fixture should be well lit.
- Each fixture should be identified with a highly visible sign – yellow can be easily spotted.
- Make sure the area for flushing under drench showers is unobstructed. The only exception is the eyewash on a combination drench shower and eyewash fixture.
- Install eyewash spray heads a minimum of 6 inches from walls or obstructions to allow the user clear access.
- Employees must be knowledgeable about the location of the fixtures and how to properly use them.
- Employee awareness and training complete the safety equation with emergency equipment.

FINAL WORD

Studies have shown that despite a general minimum of 15-minute flushing time being recommended, users usually flush exposed body parts five minutes or less. The reasons were always related to the extreme discomfort users experienced using cold water. In cold climates, the water temperature in indoor plumbed systems can be in the 2-7 °C (35-45 °F)range.