Facility Safety

Safety Showers and Eyewashes Best Practices Before, During and After Worksite Emergencies

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Does your emergency response program ensure easy and close access to a 15-minute flush of tepid water for all employees near all worksite hazards?

This is a tall order for many facilities.

Despite best intentions, many worksites' safety equipment and plans are not always in compliance with ANSI standards, which poses an enormous safety risk to workers, management and businesses.

Consider the following strategies for establishing a solid worksite safety program that improves processes before, during and after an injury occurs:

Conduct annual site surveys

Start with a site evaluation that pinpoints at-risk areas, potential hazards and emergency needs, and evaluates factors like product location, water supply, water temperature, accessibility and equipment selection.

Some product manufacturers offer complimentary safety shower and eyewash system site surveys to guide equipment operation and placement, and ensure compliance with the ANSI/ISEA Z358.1–2014 American National Standard for Emergency Eyewash and Shower Equipment standard and/or meet corporate goals or best safety practices.

In addition to ***Safety Data Sheets (SDSs),*** provided by chemical manufacturers, distributors, or importers for each hazardous chemical located in the facility, it's also important to reference ANSI/ISEA Z358.1–2014, which cites installation, testing, performance, maintenance, training and usage requirements for emergency eyewash and drench shower equipment.

After the initial site survey, it's essential to review placement, installation, standards and requirements at least annually.

Understand emergency equipment

It's a good idea to research what types of safety shower equipment are appropriate for different types of hazards. In general:

- *Emergency eyewash stations*
  - Effective for spills, splashes, dust or debris likely to affect only the eyes
  - Provides a controlled flow of water to both eyes simultaneously
  - Delivers an uninterrupted, 15-minute supply of tepid water. Plumbed units can supply a greater volume of water – between 2.0 and 5.0 gallons per minute (7.5 and 19.0 liters per minute).
- *Emergency eye/face wash stations*

    - Used when the entire face is at risk from spills, splashes, dust and debris
    - Irrigates the eyes and face simultaneously
    - Provides a large distribution pattern of water – a minimum of 3.0 gpm (11.4 lpm) – to rinse the eyes and entire face
- *Emergency showers*
    - Used when larger areas of the body are at risk
    - Flushes a larger portion of the body but is not appropriate for the eyes (a **combination eyewash and drench shower** may be used to simultaneously flush the eyes and rinse larger areas of the body)
    - Delivers flushing fluid of 20 gpm (75.71 lpm)

ANSI requires that all emergency showers must be designed and installed so that when activated they can be used without requiring the use of the operator's hands.

When selecting new equipment, newer models are recommended, as product manufacturers are always looking for new technology to improve efficacy of eyewash stations and showers. In the past few years, for example, fluid dynamics technology has improved product performance, attained better washdown over greater areas of the face and body, and helped increase user comfort.

Ensure fixtures are stationed properly

Units should be stationed close to hazards, easily seen and accessed, and be in immediate good working order. Consider these guidelines, which reflect the ANSI/ISEA Z358.1-2014 standard:

- Fixtures must be within 55 feet of a potential hazard and take no more than 10 seconds to reach. Access to the fixture must not be obstructed.
- Equipment must be on the same level as the hazard. If there are doors between the hazard and the fixture, they must swing in the direction of travel.
- The height of the eyewash flow pattern should be between 33 and 53 inches, and measured from the floor to the water flow.
- If a potential chemical spill in an area can affect multiple workers, enough fixtures should be in place for all to access.
- If corrosive chemicals are used, the drench shower or eyewash should be placed immediately adjacent to the hazard.
- All equipment must be identified in a well-lit area with highly visible signage, e.g., bright yellow; it should be able to be activated in less than one second.

Designate emergency response practices

Employees need to be trained on the purpose, proper use and location of fixtures; this includes how to alert emergency medical response teams during an emergency.

Signaling devices, which are connected to showers and eyewashes, help employees contact and expedite emergency medical response. When safety equipment is activated, the signaling devices automatically turn on a highly visible flashing light and a loud sound designed to cut through ambient noise. The signaling systems draw attention to the specific emergency location, alert management to contact first responders, and provide remote monitoring of equipment.

Continue regular testing and inspections

Weekly equipment inspections and activations are necessary to ensure that all safety equipment

remains in compliance with changing worksites, machinery, employees and worksite risks. Check that equipment is placed in accordance with the ANSI standard; works properly with no missing parts; has lines flushed regularly; is protected against freezing; and uses heated tepid fluid between 60-100°F or 16-38°C.

Certainly, product performance is essential. However, employee training, continuing education and communication all go a long way in helping workers become confident and prepared to make better-informed decisions – before, during and after – an emergency situation.

For more information on all the eye and body wash solutions Bradley offers, please visit mscdirect.com.

