

BULLETIN

Risk Control

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May 2010

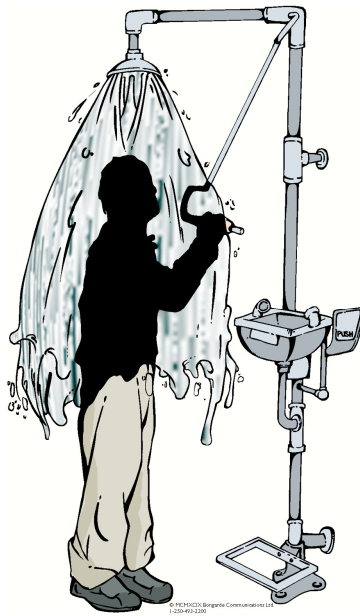
Emergency Eyewash Facilities

Safety showers and eyewashes help prevent long-lasting medical problems, and scarring by neutralizing injurious corrosive materials after an employee is exposed to them. Eyewash facilities must be provided in or near work areas where corrosive substances are used. These include any area where chemicals are mixed or diluted, battery charging / servicing areas, and dry chemical storage areas.

The emergency eyewash and shower group of the Industrial Safety Equipment Association developed a relevant standard (ANSI/ISEA Z358.1-2009) regarding six different types of emergency eyewash and shower equipment.

- ✦ **Emergency shower:** A unit that enables a user to have water cascading over the entire body. This unit is used for general irrigation of the body and although it can be used to rinse the face, the unit is not meant for flushing of the eyes.
- ✦ **Eyewash:** A unit that supplies fluid to irrigate and flush the eyes.
- ✦ **Personal eyewash:** A supplementary eyewash that supports plumbed units, self-contained units, or both by delivering immediate flushing for less than 15-minutes. The personal eyewash is used for immediate flushing, and while the victim is moved to another unit. Irrigation should continue once the victim reaches the other unit.
- ✦ **Eye/face wash:** This device is used to irrigate and flush both the face and the eyes.
- ✦ **Hand-held drench hose:** This is a flexible hose connected to a water supply and used to irrigate and flush eyes, face, and body areas. With this unit it may be necessary for another

person to hold the hose to allow the victim to hold his or her eyes open.



- ✦ **Combination unit:** An integrated shower with an eyewash.
- ✦ **Plumbed unit:** A unit permanently connected to a potable water source.
- ✦ **Self-contained unit:** This is not permanently installed and must be refilled or replaced after use.

In general, the type of hazard and the number and availability of personnel help to determine what type of emergency wash equipment to install. The most commonly used emergency wash equipment is the overhead deluge shower, the combination deluge shower with multiple-spray units, and the complete multiple-spray decontamination unit.

A laboratory safety shower does not always give the same drenching effect of the standard overhead shower. Because of the type of shower head and the angle the water falls, the person using a laboratory safety shower must turn and strain to make sure all chemicals are washed away. This type of shower is suitable where the upper front portion of the body is exposed to chemicals (such as bench work in a laboratory). Even then, the overhead shower should be considered as a backup precaution. The drench shower is not suitable for washing out the eyes, because too much water is flowing downward making it difficult to position the face under the shower.

Training to Use Eyewash and Safety Shower Facilities

Since timing is so important to avoid long-term injuries from toxic or corrosive substances, training should ensure that each person is familiar with controls and operating devices of the unit. Directions for use of safety equipment should be written, available, and frequently reviewed.

Because the muscles of the eyes react quickly and strongly to chemicals, it is almost impossible to keep the eyes open for irrigation purposes. For this reason, valves must be located so they can be turned on easily and will remain on until effort is made to turn them off.

The following list offers information for training employees in the proper use of eyewash and safety shower facilities.

- ✱ In case of chemical exposure, flush skin or eyes with cool water for at least 15-minutes. **DO NOT RUB!**
- ✱ Get medical assistance immediately following flushing.
- ✱ If possible, continue flushing while on the way to medical help.
- ✱ Know the effects of chemicals with which you are working. Read, ask questions about, and understand material safety data sheets for each chemical with which you work.
- ✱ Always wear personal protective equipment.
- ✱ Learn the location and use of all emergency equipment, even if you are working in a new area for only a brief time.
- ✱ Know how to help others reach showers or eyewashes, and how to help them get medical assistance.
- ✱ Hold your eyes open with your hands while using an eyewash to be sure water reaches the eyes.
- ✱ Remove contaminated clothing after the shower has been activated.
- ✱ Immediately wash off even small amounts of chemicals.



Location of Eyewash and Safety Shower Facilities

Because the first few seconds after exposure to a chemical are critical, eyewash and safety shower facilities must be within ten or fewer seconds of an employee's reach. Eyewash and safety shower facilities should not be separated from the hazard site by a wall or partition that would cause an employee to go through a doorway. The area

should be well-lit and away from electrical equipment (e.g., panels, outlets, switches, etc).

Maintaining Eyewash and Safety Shower Facilities

Regardless of how well a safety shower or eyewash is installed, if it is not properly maintained and tested it is of little or no use. Maintenance records should show the date of inspections and the name of the inspector.

Plumbed equipment must be activated weekly to flush the line and to verify proper operation. If an eyewash or safety shower is located in poor drainage area facilities, a bucket or drum mounted on a dolly or roller may be used to collect water during routine flushing. The person testing the showers and eyewashes should turn them to full flow to allow residues and other substances accumulated in the lines to be pushed out and washed away.

UPDATED TRAFFIC CONTROL REGULATION

In December 2009, the Federal Highway Administration (<http://www.fhwa.dot.gov/>) published the 2009 edition of the Manual on Uniform Traffic Control Devices (mutcd.fhwa.dot.gov/kno_2009.htm)

The American Traffic Safety Services Association (ATSSA) is hosting a free webinar on four separate dates to review the major changes to Part 1 (General) and Part 6 (Temporary Traffic Control), of the Manual on Uniform Traffic Control Devices, 2009 Edition.

The webinar dates are May 27, 2010, June 28, 2010, July 27, 2010, and August 24, 2010. All four dates address the same content. Registered participants will receive a free CD-ROM with the webinar content following completion. To register, go to www.atssa.com or call (877) 642-4637.

Coming in Next Month's Bulletin . . . Watch for the announcement of the latest Safety Award Winners

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