



Weekly Safety Meeting

Your Safety Is Our Business®

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Emergency Eye Wash and Deluge Showers

Let's hope you never need one, but if you do let's hope it's clean and accessible. If you get foreign particles in your eyes or a chemical spill on your body, an emergency eyewash station or deluge shower is the most important initial step in first-aid treatment. Chemical burns to the eye are among the most urgent of emergencies.

Toxic Substances, when coming in contact with the eye, immediately begin to damage sensitive eye tissue. The longer they remain in contact, the greater the damage to the eye. Besides tissue damage, acids and alkali can change the pH in the eye itself. When the pH of the eye begins to get out of the narrow tolerable range, severe eye damage, including blindness, may result. Therefore, it is imperative to begin flushing as quickly as possible after the eye comes in contact with a harmful substance.

Eyewash/Shower is **REQUIRED** if:

- The Safety Data Sheet indicates a chemical in use is caustic, toxic, or corrosive.
- The SDS informs that serious eye damage may result.
- Warnings such as "causes chemical burns" or "causes permanent eye damage" are posted on container labels.

Eyewash/showers must have the following:

- Pure clean water;
- Hands-free operation;
- Constant water flow rate for a full 15 minutes;
- Highly visible markings and signs;
- Unobstructed access;
- Accessibility
 - The single most important treatment for chemically burned eyes is copious irrigation within seconds of injury. This means that victims should not have to climb over or around obstacles to find the eyewash station. Make sure there are no barriers to the unit.
- Clean, Functional Equipment
 - Deluge showers should be inspected often to insure they function properly with adequate water flow and are clean and sanitary. Portable eyewash units are an option in areas where plumbed in water is not accessible or of high enough quality. Portable units also need an anti-bacterial additive to ensure proper water sanitation. Flushing with any water is better than none, but purified water reduces potential for secondary eye infections.



The First 10 Seconds are Critical:

As mentioned, toxic Substances immediately begin to damage sensitive eye tissue, so it is imperative to begin flushing as quickly as possible after the eye comes in contact with a harmful substance.

When irritating or corrosive foreign substances get into the eye, the eyelids involuntarily clamp shut. Therefore, the person requiring the use of an eyewash device frequently needs assistance to find his/her way to the device.

This is best accomplished by two persons, each taking an arm of the injured person, and quickly leading him/her to the nearest eyewash device.

The helpers then activate the eyewash device and position the water stream so that the injured person can flush the eye from the inside corner to the outside corner.

It is important to remember this so that the harmful substance is not flushed into the other eye. As mentioned before, since eyelids involuntarily clamp shut when irritated, the victim can use his hands to hold open the eyelids to allow emergency eye flushing. ANSI guidelines suggest a full 15 minutes of flushing before seeking further medical help.

Proper Use:

Employees who are exposed to possible chemical splashes must know in advance how to use an eyewash/deluge station properly:

- Immediately after the accident, flood the eye with water or eyewash solution, using fingers to keep the eye open as wide as possible. Water may be colder than body temperature, which can be uncomfortable, but it is imperative to irrigate for the recommended period of time.
- Roll the eyeball as much as possible, to remove any loose particles retained under the eyelids.
- Do not put anything except water into the eyes to remove particles.
- The eyes should be irrigated for at least 15 minutes and the victim transported to a medical facility immediately after. Continue irrigation of eyes during transport. The best way to accomplish this may be to have a portable eye-wash system ready that can be carried along.

Don't let the lights go out, wear eye protection!!

