# Emergency Eyewash Stations Meeting Kit




If you have an accident at work that involves your eyes, an emergency eyewash station can protect you from serious eye damage or the loss of your sight. When you work with corrosive, irritating, toxic, or tissue-damaging materials in the workplace, it is important to have an emergency eyewash station immediately available.

**How To Choose Emergency Eyewash/Shower Station**

Once you have determined that an emergency station is needed, you need to define whether a portable or plumbed station is most appropriate. A portable eyewash is a self-contained ANSI-compliant emergency response product that is needed for locations that have no access to water and that can be moved to meet a facility's rapidly evolving needs. Various types of portable eyewashes are available, including gravity-fed, air-pressurized and personal squeeze bottles (reference ANSI Z358.1 "Supplemental Equipment/Personal Wash Units," Section 8.1). Portable stations can provide added flexibility that is a benefit in today's dynamic work settings.

A plumbed unit is just as it sounds – a permanent emergency response solution that is in a fixed location connected to a continuous source of potable water with sufficient flow and pressure for ANSI compliance and victim comfort.

ANSI Z358.1 requires that all emergency stations – portable or plumbed – must provide sufficient flow (flow rate depends on product type [i.e., eyewash vs. eye/face wash vs. shower]) for a minimum of 15 minutes. They are also required to be located within 10 seconds of the potential hazard. Supplemental eyewashes, such as personal squeeze bottles, are a useful solution while a victim is on route to primary equipment.

**Ask yourself these questions when determining if a portable or plumbed unit is needed:**

1. **Does the potential hazard stay in the same location within the facility or is it mobile?** If it is a static workstation, a plumbed unit is the recommended product choice and must be installed within 10 seconds of the hazard. If the hazard is mobile, such as at a construction site, a portable product is recommended and should be placed within 10 seconds of the hazard.

2. **Does the location need tempered water (60-100° F/?16-38° C)?** If the emergency fixture will be located in areas where the internal water temperature could drop below 60° F (16° C) or rise above 100° F (38° C), the water temperature will need to be regulated. Only a few manufacturers offer portable units with an option for tempered water, therefore a plumbed unit along with a tempering solution is the recommendation.

**MAINTENANCE OF PORTABLE AND PLUMBED UNITS DIFFER**

As portable units hold stagnant water, they are required to be drained and refilled with potable water on a more frequent basis. Most eyewash manufacturers offer a sterile preservative that keeps the water for an average of three months. On a weekly basis, ANSI requires a visual inspection to take place to ensure the unit is full and clean. Regarding plumbed units, ANSI mandates a weekly activation requirement to verify proper operation and flush buildup that may have formed due to stagnant water in the piping and unit.

**THE IMPORTANCE OF EYEWASH STATIONS**

The first 10 to 15 seconds after exposure to a hazardous substance, especially a corrosive substance, are critical. Delaying treatment, even for a few seconds, may cause serious injury.

Emergency showers and eyewash stations provide on-the-spot decontamination. They allow workers to flush away hazardous substances that can cause injury.

**WHAT IS A 'FLUSHING FLUID'?**

The ANSI standard defines "flushing fluid" as any of potable (drinking) water, preserved water, preserved buffered saline solution or other medically acceptable solutions. Local laws may apply in some cases.

**How long should the contact area be rinsed/flushed?**

ANSI Z358.1-2014 does not specify how long the affected body part should be rinsed. It does specify that the equipment installed according to the standard be capable of providing flushing liquid for a minimum of 15 minutes.

Other references recommend a minimum 20-minute flushing period if the nature of the contaminant is not known. The flushing or rinsing time can be modified if the identity and properties of the chemical are known. For example:

- 5-minutes for non-irritants or mild irritants,
- 15-20 minutes for moderate to severe irritants and chemicals that cause acute toxicity if absorbed through the skin,
- 30 minutes for most corrosives, and
- 60 minutes for strong alkalis (e.g., sodium, potassium or calcium hydroxide).

**WORKER TRAINING:** All workers require instruction in the proper use and location of eyewash stations before any emergencies occur. It should never be assumed that workers are already aware of the proper procedures. Written instructions should be made available to all workers and posted beside the emergency shower and eyewash station. Part of the instructional process should include a "hands-on" drill on how to find equipment.

## FINAL WORD

According to the Centers for Disease Control and Prevention (CDC), 2,000 workers suffer job-related eye injuries in the United States every day. Employers are required to provide personal protective equipment and establish engineering controls to prevent injuries, but even with the best prevention, accidents happen.