EYE WASH
90% of eye injuries are preventable with the use of proper safety eyewear.

Approximately three out of every five workers injured were:

- not wearing eye protection at the time of the accident;
- wearing the wrong kind of eye protection for the job.

Hence, proper eye wash and eye wash facilities needed for any environment that exposes people to materials that can cause injury.

WSH Regulations mandates that person who handle hazardous materials must have proper facilities for quick drenching or flushing of the eyes and body.
All laboratory users must be familiar with the location and use of eye wash and safety showers even if they do not work directly with toxic or corrosive chemicals.

You may be called upon to aid a someone who has had an spill to the eye or the body.

The distance from the location should not exceed 10-15 seconds walking distance. The path to the safety shower or eye wash must be unobstructed.
Emergency Shower

Body Coverage, other than eyes

ANSI Z358.1-1990
Why so special?

- Be able to deliver a pattern of water with a diameter of at least 50 cm at 2.2 m.
- Shower head is between 2.1 m to 2.4 m from the floor.
- Minimum volume of spray is 70 litres/minute for a minimum time of 15 minutes.
- Shower activation time must be one second and remain open.
- Lever should not be more than 1.75m from the floor.
When Splashed

- Remain Calm.
- Bring casualty immediately to the shower.
- One quick tug, pull the lever to activate flush.
- If possible, remove contaminated clothing under shower.
- Stay for 15 minutes.
- Seek medical treatment fast, especially if CMAR or corrosive liquids/solids.
Spare Clothings

- Laboratory must have if possible clean towels, clean plastic bags for contaminated clothings, clean clothings with disposable undergarments and slippers.
Eye/Face Shower

Eye Shower
Eyewash Stations

- Deliver water to both eyes simultaneously; at least 10 litres/minute for 15 minutes.
- Pressure of water should NOT be high enough to cause eye injury.
- Mounted 84 cm to 115 cm from the floor.
- Activation time of one second or and stay open.
- Actuating flap or foot pedal should be in easily located.
- Must have nozzle caps, flipped opened easily when activated.
Flush eyes and eyelids with water or eye solution for a **minimum** of 15 minutes. “Roll” eyes around to ensure full rinsing.
When Splashed

- Keep Calm, Do not touch or rub the eyes.
- Bring Casualty to the eye wash.
- Activate station.
- Rinse hand (for 5 seconds).*
- Lower head; Remove safety spec, goggles or spectacles.
- Do not remove contact immediately, flush it out.

* Also to clear first few seconds of stagnant water
• Allow casualty to remove contact lenses if possible. DO NOT FORCE.

• Remove contact lenses as soon as possible. Reduce chemicals being trapped behind the lenses.

• If contact is “stuck” keep rinsing till ambulance arrives. Use eye patch; transport.

• Hold eyelids open using the thumb and index finger.

• Eyelids must be held open. “Roll” eyes. Rinse in eye folds.

• Practice of this procedure to help familiarize potential users with the feel of rinsing.
How long should the contact area be rinsed/flushed?

- Affected body part must be flushed immediately and thoroughly for at least 15 minutes using a large supply of clean fluid under low pressure.

- Water does not neutralize contaminants - it only dilutes and washes them away. This fact is why large amounts of water are needed.
Drenching Hose
• rinse the **effected** eye immediately with gently flowing water for at least 15 minutes. Hold the victim's head under the drenching hose. (Rinse right over contact lenses)

• Keep rinse away from the unaffected eye.

• If both eyes are affected, rinse both.

• Use index finger and thumb to keep eyes open.
Sterile Water Bottle

Keep your hands clear of rinsing water

Apply an eye pad
What Can Go Wrong
Above 20°C bacteria can multiply in water that is stagnant for a long time.
End of Presentation