

The Faculty of medicine Mansoura University

LABORATORY SAFETY EQUIPMENT

Laboratory Safety Equipment

1- Fume Hoods

2- Chemical Storage Cabinets

3- Individual Storage Containers

4- Refrigerators

5- Eye Wash Stations

6- Safety Showers

7- Fire Safety Equipment

8- First Aid Boxes

9- Spill Control Kits.

Lab Fume Hoods



Conduct all chemical experiments in a fume hood.

Face velocity 80 – 100 feet per minute.

Hood locations must be away from doors, windows, and pedestrian traffic.

Chemical Storage Cabinets



Flammable storage cabinets are designed for storage of flammable and combustible liquids.

Acid/corrosive cabinets are designed for corrosion resistance.

Individual Storage Containers



A safety can is an approved container of no more than five (5) gallons capacity. It has a spring-closing lid and spout cover, and is designed to safely relieve pressure buildup within the container.

Refrigerators

Will have self-contained electrical elements to avoid spark-induced explosions.

Explosion-proof refrigerators are specially designed for hazardous environment, featuring enclosed motors to eliminate sparking.

Eye Wash Stations



Should be readily available and accessible to all lab personnel.

Located in areas – 10 seconds to reach – 100 feet.

Valves activated in one second and should stay open.

Eye Wash Stations



0.4 gpm for 15 minute.

Gravity feed self-contained: areas inaccessible to plumbing.

Faucet-mounted: provides cont. water flow while freeing hands to open eyelids.

Safety Showers



Accessible locations –
100 ft, 10 seconds to
reach.

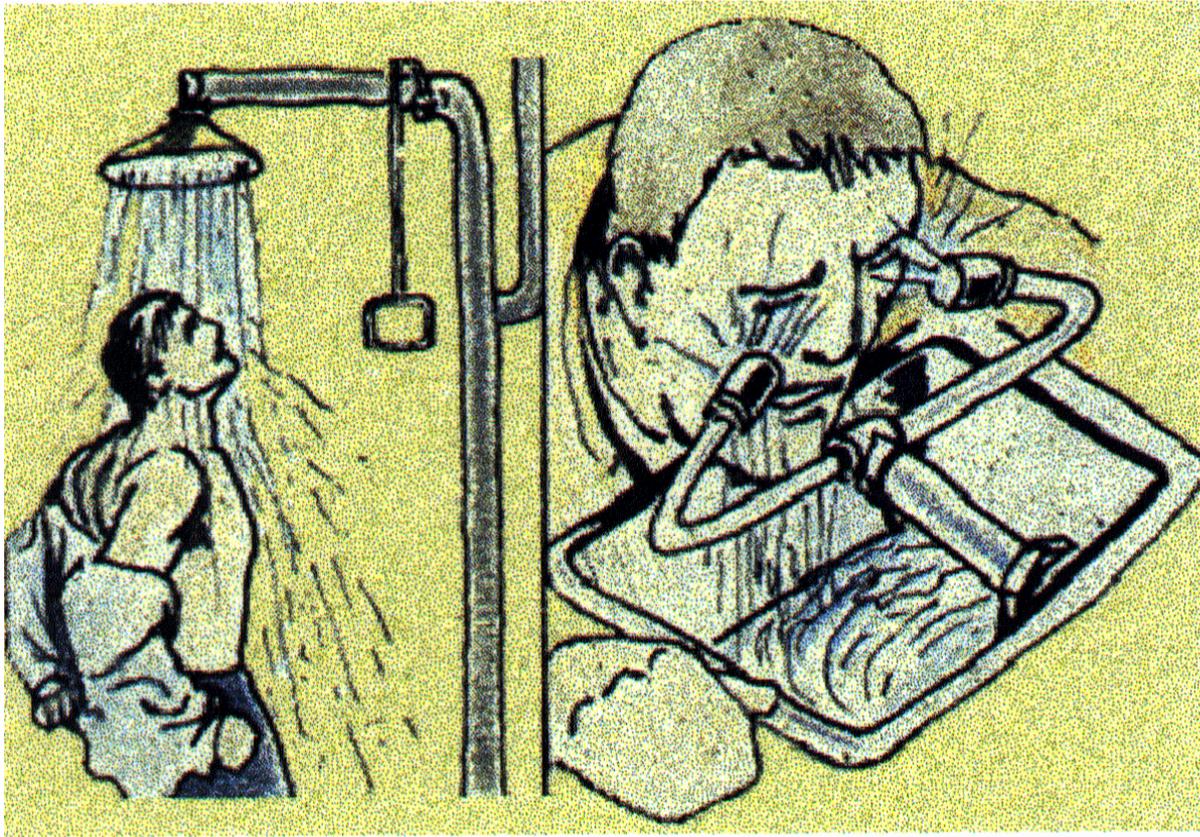
Flow rate = 20 gpm

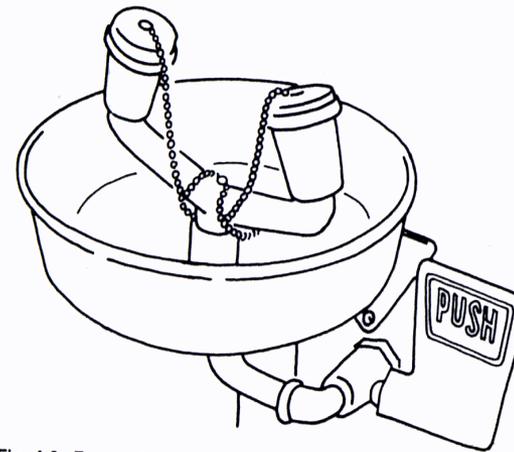
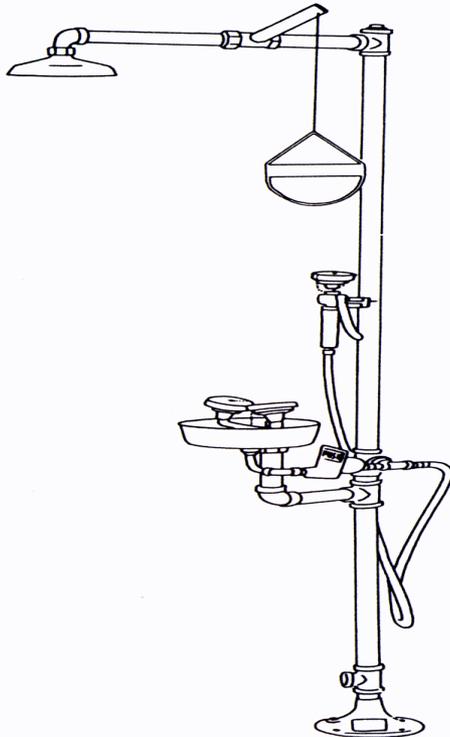
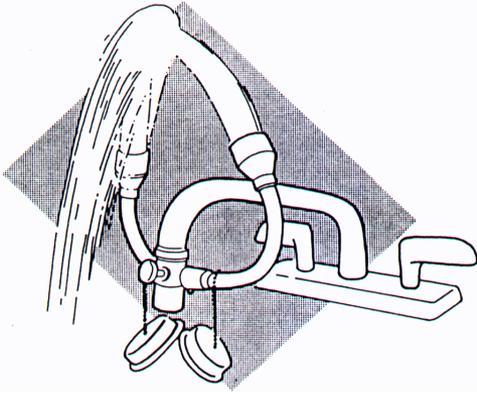
Valve activated in one
second and stay open.

Near drainage systems

Stream of water to cover
the whole body.

Eye Wash & Safety Showers





Fire Safety Equipment

1- Alarms

2- Fire Extinguishers

3- Blankets

4- Sand Buckets

5- Sprinklers

First Aid Boxes

Suitable first aid boxes according to the number of lab personnel.

Suitable first aid materials – burn ointment.

Spill Control Kits

Mercury spill kit

Acid, Alkaline, and solvents
spill kits

Sorbent materials

