

LABORATORY SAFETY RULES

Lab (1)

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Personal protective equipment

1. Protective rubber gloves with rough palmar surface to prevent slipping and provide resistance to chemical materials.
2. Protective eye glasses protect the eyes from sudden splashes of chemical materials and glass shards. It is known that eye contacts don't protect the eyes and may carry foreign bodies that affect the pupil of the eye and are difficult to remove in the event of chemical splashes. Eye contacts may also absorb chemical vapors when handling certain chemicals.

3. Protective face and neck mask is used when handling explosive chemicals.

4. Laboratory coat which protects the body when the harmful materials are splashed or spilled .





Personal Protective Equipment



PPE



THURS

Some types of hazards in laboratories

Risks arise either from an unhealthy work environment or improper performance, Among the accidents that laboratory workers may be exposed to are:

1- Fire

2- infection

3- Chemical liquids and gas leaks

4- Solid chemical material dispersion

5- Touching electrical current

6- Touching harmful chemical materials

7- Touching hot objects

8-Fall

9-Collision

10-Slipping



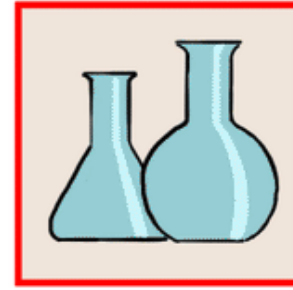
ANIMAL
HAZARD



SHARP INSTRUMENT
HAZARD



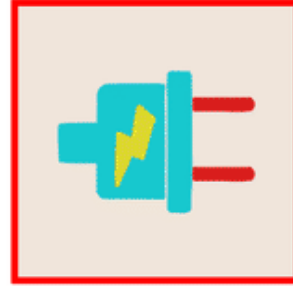
HEAT HAZARD



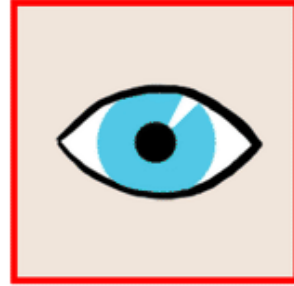
GLASSWARE
HAZARD



CHEMICAL
HAZARD



ELECTRICAL
HAZARD



EYE & FACE
HAZARD



FIRE
HAZARD



BIOHAZARD



LASER RADIATION
HAZARD



RADIOACTIVE
HAZARD



EXPLOSIVE
HAZARD

Types of laboratory injuries

1-Poisoning

2-Nausea

3-Allergy

4-Headache

5-Suffocation

6-Fainting

7-Wounds

8-Thermal burns

9-Chemical burns

10-Electric shock

Symptoms of exposure to chemical substances

- Itching or redness in the eyes
- Itching or redness in the skin
- Difficulty breathing
- Headache
- Nausea
- Burns in the skin

WEAR APPROPRIATE CLOTHING

Safety goggles should be worn at all times

Jackets, ties and other loose garments should be removed

Long sleeves should be rolled up

Long hair should be tied back

Closed toe shoes should be worn

Dress Code



❖ NO EATING OR DRINKING IN LAB!

FOLLOW DIRECTIONS CAREFULLY

Read procedure before beginning lab work.

Never do anything not called for in procedure.

Keep work area clean and tidy and keep flammable materials away from flames. Always be aware of your surroundings.

Fire extinguisher

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WORKING WITH TOXIC SUBSTANCES

Activities involving poisonous vapors should be done in the lab hood.

Use wafting motion to direct odors to nose.

Never touch or taste any substance unless directed to do so.

Do not pour toxic, corrosive or insoluble liquids down the sink.

KNOW EMERGENCY REPOSES

Know the location of emergency equipment and how to use them.

Always report accidents to instructor immediately.

Wash your hands before you leave the room.





HANDLING GLASSWARE

Never handle broken glass with hands.

Do not place hot glassware directly on table, use an insulating pad.

Allow plenty of time for hot glass to cool.



HEATING SUBSTANCES

Always turn burner off when not in use.

Point heating test tubes away from yourself and others.

Never look into a container that is being heated.

Never heat a closed container.

Never leave a substance being heated unattended.



HANDLING CHEMICALS

Read labels, take only as much as needed.

Do not return unused reagent back to bottles.

When transferring chemicals, hold container away from your body.

IF YOU'RE NOT SURE.....SIMPLY ASK!

