

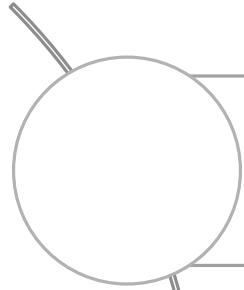
# **Laboratory safety**

## **Safety rules for medical biochemistry lab**

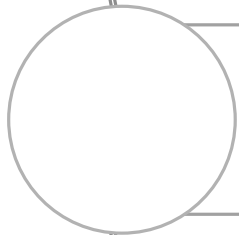
**By Dr. Yasmine Sami**

**Medical biochemistry 2022-2023**

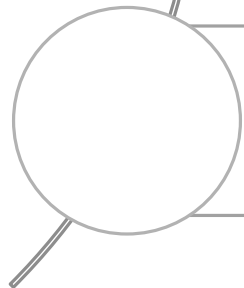
# Intended learning outcomes



Understand the proper laboratory safety



Increase the awareness of the possible risks or hazards involved with laboratory work

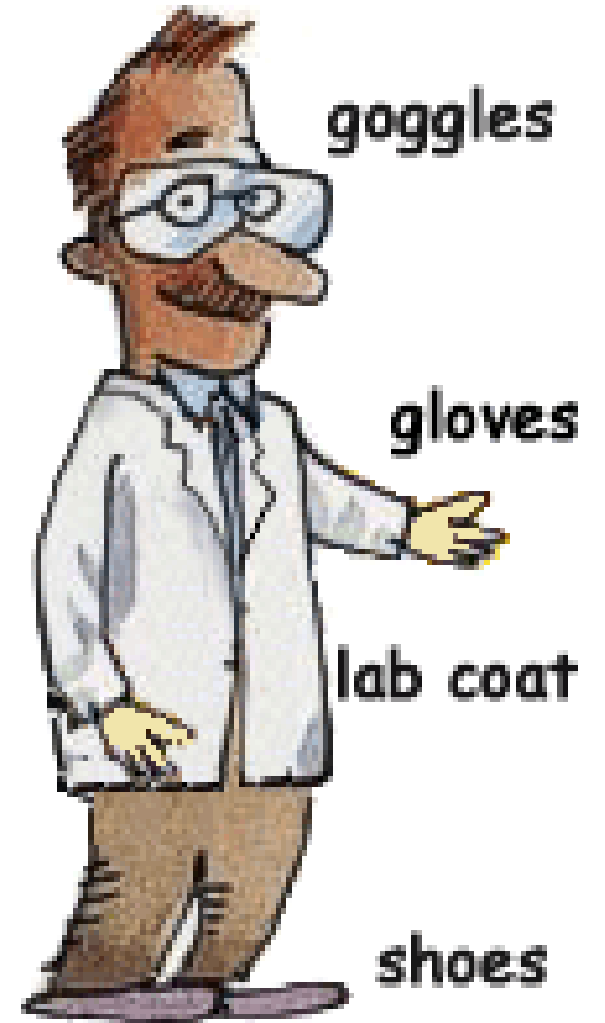


Realize the laboratory is generally a safe place to work if safety guidelines are properly followed

# Appearance and attitude in the lab

## *While working in the lab*

- You must wear your clean **white coat**
- Wear approved **safety goggles** or **safety glasses** when instructed in the lab
- Wear **gloves** if you will come in contact with blood specimens
- Tie up long hair during laboratory activities



# Appearance and attitude in the lab

**Do not** use any flammable materials such as perfumes

**Try always to wear leather shoes that cover your feet**

Sandals and open-toed shoes do not protect your feet from broken glass that is frequently found in the lab.



# Appearance and attitude in the lab

Eating and drinking are **not allowed** in the lab

Side talks and the mobile are not allowed in the lab



These activities are ways by which you can accidentally ingest harmful chemicals



# Appearance and attitude in the lab

**Do not taste** any chemical!



# **Appearance and attitude in the lab**

- **Only laboratory manuals are permitted into the working area**
- **Listen to your instruction carefully**
- **Read the instruction guide ahead of performing the experiment**

# General work procedure

Use only clean & dry glassware and never use **broken** or **chipped** glassware

**Check glassware for stars or cracks**





# General work procedure

Always **ADD acid** to water

Pour **from larger** containers to smaller ones

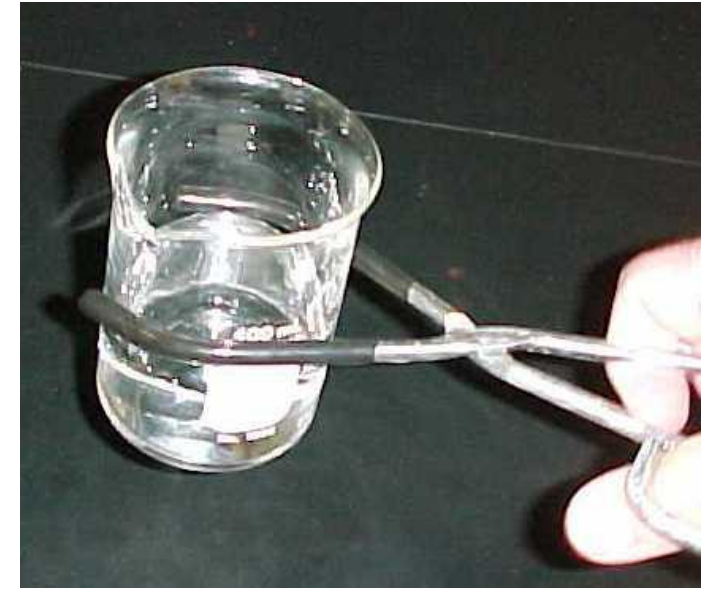
Never pour used reagents back into bottle



# General work procedure

Handle hot glassware with **holder or tongs**

Always point **test tubes** away from yourself and others when heating



# General work procedure

**Test for odor of chemicals only by waving your hand above the container & sniffing cautiously from a distance**



# General work procedure

Use a **rubber suction bulb** , **pump** or other device to fill a pipette



# General work procedure

- **When in doubt ! – Ask !!! Do not guess**

# Hygiene practice

- **Keep hands away from face, eyes, and clothes during lab**
- **Always clean instruments & laboratory area before leaving**
  - **Keep bench tops clean**
  - **Return all equipment to its original location**
  - **Clean all spills immediately**

# Hygiene practice

Wash hands with soap and water  
before leaving the lab

This rule applies even if you  
have been wearing gloves!



# Emergency procedure

## Know the hazards of the materials being used

Read and reread labels carefully to make sure that you are using the right chemical.

Pay attention to the warnings about the chemicals used in the lab.





# Emergency procedure

- In case of accident as an acid or alkali burns, wash the affected area immediately with plenty of water
- In case of eye injury, flush eyes immediately with plenty of water for at least 15 minutes
- Inform the supervisor immediately about any problem or accident in the lab

THANK YOU !

ANY QUESTIONS ??

PLEASE ASK