

Anatomy & Physiology

Laboratory Safety Hazards

CLINICAL LABORATORY

- ➔ Central role in health care
- ➔ Exposes workers to a variety of potential hazards.

(UP) – Universal Precautions

(BSI) – Body Substance Isolation

(SP) – Standard Precaution

Occupational Safety Health Administration (OSHA)

- ➔ Provides a safe working environment.
- ➔ US Government

❖ UP

- ➔ "All patients are considered potential carriers of blood-borne pathogens.
- ➔ Did not consider other body fluids as potentially infectious.

LABORATORY HAZARDS:

1. Biological hazard
2. Chemical Hazard
3. Fire Hazard
4. Electrical Hazard
5. Physical Hazard
6. Radioactive Hazard
7. Sharps Hazard
8. Ergonomic Hazards

❖ BSI

- ➔ Modification of UP.
- ➔ "All body fluids and moist body substances potentially infectious.
- ➔ Did not recommend handwashing after wearing of gloves especially if no visible contamination.

BIOLOGICAL HAZARD

- ➔ Potential exposure to pathogenic microorganisms.

e.g.: Bacteria, Fungi, Virus, Protozoans

- ➔ *Pathogenic* – a thing disease causing
- ➔ *Microorganisms* – living organisms that can't be observed by naked eyes.

❖ SP

- ➔ Major features of UP and BSI.
- ➔ Most commonly followed
- ➔ Handwashing, gloves, mask, eye protection, face shield, gown.

REGULATIONS:

AGENCIES:

1. Center for disease control & prevention (CDC)
2. OSHA

ESSENTIALS OF STANDARD PRECAUTION

1. Eating, drinking, smoking and applying of cosmetics.
2. Inserting/removing contact lens
3. Biting on nails, chewing on pens
4. Mouth pipetting
5. Limiting access to the laboratory
6. Patients as infectious for blood-borne pathogens.