# Good Laboratory Practices (GLPs)

#### contents

- Defination
- Principle
- Quality assurance unit
- Maintenance & Calibration of Equipment
- SOPs
- Reagents & solution
- Personal protection equipment
- General precaution
- Lab working areas
- Quality control.



#### GLP: GOOD LABORATORY PRACTICE

GLP deals with the organization, process and conditions under which laboratory studies are

- Planned
- Performed
- Monitored
- Recorded
- Reported.



#### Aim of GLP

#### To reduce hazards and risks to

- Employee
- Customer
- Third parties (Society)
- Environment

#### Principle of GLP

Four principles:
Good Management
Quality Assurance
Monitoring



## GLP require in

- 1. Management
- 2. Meeting requirements
- 3. Transport
- 4. Receipt & handling
- 5. Processing
- 6. Storage
- 7. Reporting
- 8. SOP & WDI
- 9. Quality assurance programme
- **10**. Storage and retention of records and materials.

# Quality Assurance Unit Maintain a copy of all record Monitoring of each process at interval Confirm that no deviations from WDIs or SOPs

Maintenance & Calibration of Equipment



# SOP

- Written procedures for a laboratories program.
- Define how to carry out activities.
  - Actions to be taken in response to equipment failure.



# Various SOP

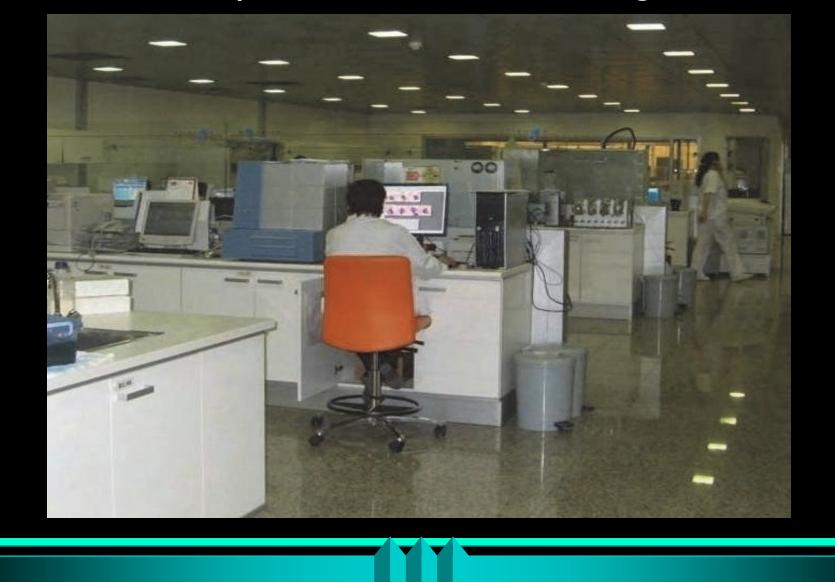
- Analytical methods
- Keeping
  - Records
  - Reporting
- Storage
- Retrieval of data
- Inspection
- Cleaning & Waste
- Maintenance
- Testing and calibration.

# Lab working area

- Neat & clean
- Free of materials that are not required.
- Decontaminate of working surface
- Dispose the contaminated materials, specimens, cultures.

 Well separation of different working area, including for changing & Refreshment.

#### Good separatation of working areas



#### Personal protection equipment

#### Lab coat

Gloves for prevention of accidental contacts.

- Spectacles
- Mask
- Shoes

#### **General Precaution** Don't handling contact lens in lab. Vaccination to employee e.g. Hepatitis B Proper Hand washing after work. Instuments Well located Maintained Mouth pipetting strictly avoided Don't held materials or articles in mouth Don't lick or wet lables for sticking.

### **Collection & Transport** Proper collection technique Appropriate Vaccutte Cold Chain maintain Safe & Tight container – Avoid spillage from container (Double container) **Bio-hazard label on container**



## Receiving of sample

- Proper shorting of sample
- Reject contaminated requist form due to sample spillage
- Follow WDI of rejection & acceptance criteria for sample

# Centrifugation

- Close the door of centrifuge during process
- Balancing of sample
- Do not touch inner part of centrifuge with bare hand, when cleaning a part after breakage.
- Keep adequate speed.



## **Processing Of Sample**

- Follow SOP & WDI for each step of processing
- Wearing all PPEs.
- Method should be evaluated by IQC & EQC



### Equipment

- Operated only by trained person
- Strict follow WDI
- Keep Electrical plugging away from water area

#### Instrument should be

- Valid
- Efficient to meet requirement
- Calibrated
- Maintained
- Well Place

#### **Reagents and Solutions**

- Labeled
- Out dated = not be used
- Note opening date
- Note Expiration date
- Well Stored
- Carcinogenic & Hazardous chemical use avoided.

### Waste Management

Segregation according to color code
 Treat with disinfectant before disposal
 Proper handling - Gloves

# Storage of the test material in an organized order





#### Laboratory equipment should routinely be

#### maintained and calibrated.





#### Spillage of Infected material

# Display written procedures for *clean up of* all spill

- Pour 1% freshly made sodium hypochloride sol. over spill in sufficient quantity
- Cover spill with paper towel and leave for 30 min
- Wipe up with absorbant materials &
- Wipe up the surface with soap & water.

