

GUIDELINES ON SAFE LABORATORY PRACTICE (VERSION 1/2004)

College of Pathologists, Academy of Medicine of Malaysia

1. Introduction

Adequate measures shall be instituted to safeguard the personnel, public and the environment against laboratory hazards. The pathology laboratory should refer to the WHO Laboratory Biosafety Manual which is available on the net (www.who.int/csr/resources/publications/biosafety/Labbiosafety.pdf)

2. Laboratory safety manual

A written pathology laboratory safety manual that identifies known or potential hazards and specifies practices and procedures to eliminate or minimize such hazards shall be available and accessible to all staff. The laboratory safety manual shall contain practices and procedures related to the following areas;

- (a) access to the pathology laboratory working area;
- (b) personal protection;
- (c) biosafety including standard precautions;
- (d) biosafety management;
- (e) laboratory accidents and incident reporting.
- (f) disposal of sharps, contaminated material and other hazardous laboratory waste.
- (g) sterilization and disinfection.
- (h) first aid
- (i) fire

3. Training for laboratory safety

Good laboratory technique is the key to laboratory biosafety. All pathology laboratory staff shall receive training in laboratory safety and shall be familiar with the laboratory safety manual. All relevant training should be recorded and documented and made available for inspection.

4. Employee health record

A complete health record for each staff member shall be maintained and shall include immunization records, episodes of illness and accidents in the laboratory area.

5. Bio-safety cabinets

Bio-safety cabinet class 2 (worker and specimen protection) shall be used in the following situations:-

- (i) When potentially infectious clinical specimens are initially processed;
- (ii) When there is increased risk of airborne infection; and
- (iii) When performing procedures with a high potential for aerosol generation;

6. Chemicals and radioactive substances, compressed and liquefied gases

The pathology laboratory will take all necessary precautions to safeguard the staff, public and the environment from the hazardous effects of laboratory chemicals and radioactive substances. Reference should be made to USECHH regulations 2000. There shall be written procedures for

- (a) the safe storage of chemicals and radioactive substances
- (b) precautions to be taken when mixing incompatible chemicals
- (c) steps to be taken in the event of accidental chemical or radioactive spillage
- (d) the safe disposal of chemicals and radioactive substances
- (e) the storage and handling of compressed and liquefied gas cylinders

7. Organised housekeeping services

- (a) There should be organised housekeeping services for laboratory working areas and public areas.
- (b) Dry dusting and sweeping in pathology laboratory working areas are prohibited.
- (c) Solutions, cleaning compounds, and hazardous substances shall be labelled properly and stored in safe and secure places.
- (d) Paper towels, tissues, and other supplies shall be stored in a manner to prevent their contamination prior to use.

8. Rubbish and refuse

- (a) All rubbish and refuse, not treated as sewage, shall be kept in suitable receptacles and disposed of daily.
- (b) Rubbish storage containers shall be impervious, tight, non-absorbent, and easily washable with close fitting-lids.
- (c) Rubbish and refuse containers shall be cleansed.

9. Waste

Scheduled waste, clinical, bacteriological and infectious wastes shall be disposed in compliance with any law relating to such waste.

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