

Administrative Policies and Procedures for MOH hospitals /PHC Centers	السياسات والإجراءات الإدارية بمستشفيات ومراكز وزارة الصحة
TITLE: Storage and Management of Hazardous Medications & Chemicals	
APPLIES TO: Pharmacy Staff	
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1.0 PURPOSE

- 1.1 To develop a set of safety rules and regulations that address the identification, selection, handling, storage, use and disposal of hazardous waste / materials at all areas covered by the Pharmacy Department.
- 1.2 To provide guidelines for the management of chemical spills / waste spills.
- 1.3 To establish guidelines for precautionary measures necessary to minimize accident or injury while performing duties.

2.0 DEFINITION

- 2.1 **MSDS (Material Safety Data Sheet):** Data Sheets detailing appropriate safety measures required to be carried out for each specific chemical or waste spill.
- 2.2 **HEPA Filter:** Special filter used in laminar flow hoods to purify the air inside the LFH.
- 2.3 **Hazardous Material:** Materials in various forms that can cause death, serious injury, long-lasting health effects, and damage to buildings, homes and other property.

3.0 RESPONSIBILITY

3.1 **The Director of the Pharmacy Department, Safety Officer and all the staff:** are responsible for developing, managing and implementing the handling and disposal of hazardous waste / materials, as well as managing of chemical and hazardous spills

3.2 **Head of Pharmacy Department:** is responsible for reviewing the use of hazardous materials in the Pharmacy Department annually.

4.0 CROSS REFERENCES POLICY

- 4.1 Occurrence Variance & Sentinel Events Reporting.
- 4.2 Material Safety Data Sheet.

5.0 POLICY

- 5.1 The Pharmacy Department will apply the guidelines provided by the CBAHI standards to ensure that safety measures are in place for safe handling of hazardous medications and pharmaceutical chemicals.
- 5.2 The pharmacy personnel who generate hazardous waste must ensure proper identification, collection, documentation, packaging and disposal of hazardous material according to the Hospital Safety Policy and Procedures, and be able to manage chemical & hazardous spills as outlined in the MSDS.
- 5.3 The department of pharmacy shall provide and maintain **Material Safety Data Sheets** (MSDS) for all hazardous medications and pharmaceutical chemicals within the department, with the exception of human serum derived drugs, and infectious live vaccines.
- 5.4 No pharmacy staff who are attempting to conceive, pregnant, or breast feeding will be allowed to work in areas for handling chemicals and hazardous medications

6.0 PROCEDURE

6.1 **Hazardous Chemicals (Material and Wastes):** Hazardous materials include chemicals, flammable materials and chemotherapeutic agents as well as products considered as:

- Carcinogens - may cause cancer in humans.
- Mutagens - may cause changes in human genes or chromosomes.
- Teratogens - may cause birth defects in offspring.
- Neurotoxins - may cause damage to the nervous system (brain, spinal cord, etc.).

6.2 **Location of Hazardous Material:**

- Drug store
- In-Patient Pharmacy
- Out-Patient pharmacy

6.3 **Safe Handling And Disposal Of Hazardous Waste / Materials:**

- 6.3.1 The Pharmacy staffs working in areas where hazardous materials are used or stored are aware of and know how to safe handle dangerous substances and can change the HEPA filter of the TPN safety cabinets.

- 6.3.2 The use of the hazardous materials in the Pharmacy Department will be reviewed annually by the Head of the Pharmacy Department or his Designee; and submit the findings to the Safety Department.
- 6.3.3 All hazardous materials/chemicals are classified, labeled, and listed in areas where they are stored or used, as per department policy.
- 6.3.4 All chemicals are stored in a separate place on low shelves, and in the original labeled container.
- 6.3.5 A Material Safety Data Sheet (MSDS) is to be obtained for every chemical stored or used and identified as hazardous.
- 6.3.6 A master file of all MSDS will be kept and made available at the unit for those who are exposed to hazardous materials where they are kept or handled.
- 6.3.7 All sharps, including hypodermic needles and syringes, suture needles, knife blades, trocars from drains and opened glass ampoules of medicines will be disposed of into puncture-resistant sharp containers.
- 6.3.8 All hazardous medications and chemicals are received in the Pharmacy Department by specially designated personnel and stored in a designated area for chemicals only.
- 6.3.9 All materials considered fire hazard (flammable) should be stored in a cold dry place, well ventilated and away from areas of fire hazards, and shall also be kept away from oxidizing agents (materials susceptible to spontaneous heating, explosives, etc).
- 6.3.10 Oxidizers will not be stored close to liquids of low flash point.
- 6.3.11 Spill kits are available where hazardous material are stored or used, and staff is trained on how to handle spills.
- 6.3.12 Firefighting equipment should be kept at the storage area where flammable materials are stored.
- 6.3.13 Sensitive material such as acids and acid-fumes will be stored in a cool dry, well-ventilated area, preferably wooden.
- 6.3.14 Materials which are toxic as stored or which can be decomposed into toxic components from contact with heat, moisture, acids, or acid fumes will be stored in a

cool, well-ventilated place, out of the direct rays of the sun. Incompatible toxic materials will be isolated from each other.

- 6.3.15 Corrosive materials will be stored in a cool ventilated area (above their freeze point); should be isolated from other materials.
- 6.3.16 Personnel protective clothing and equipment (gowns, gloves, eye & face protection) will be available for use when handling these materials.
- 6.3.17 The staff that is exposed to handling hazardous materials should be trained on how to handle spills and the appropriate use of these personnel protective clothing and equipments.
- 6.3.18 In case any staff's eyes contact with chemicals, there's in the Pharmacy Department a sink available for eye washing.
- 6.3.19 A Healthcare Event Reporting Form must be completed for all hazardous materials and waste spills and exposures, to be sent to The Safety Department for review and analysis. (Ref. to HERF policy).

6.4 **Management of Chemical / Waste Spills:**

If a leak or spill is found, the following action should be taken:

- 6.4.1 Identify the chemical before attempting to clean up any hazardous chemical spills.
- 6.4.2 Obtain Material Safety Data Sheet (MSDS) on chemical, and apply the procedures for cleaning up that kind of chemical leak, or chemical spill.
- 6.4.3 Alert people in the immediate area of spill, Supervisor and Safety Officer.
- 6.4.4 Evacuate all personnel from the area and close all doors.
- 6.4.5 Ensure adequate ventilation.
- 6.4.6 Wait by the spill area in a safe distance, until assistance arrives to provide guidance to the Safety Officer.
- 6.4.7 Complete a HERF Form for spill or leak.

6.5 **Safety Measures for Equipment and Instruments:**

- All equipment used in the pharmacy shall be operated according to the manufacturer's instructions and tested annually by the Bio Medical Engineering Department.
- Pharmacy personnel should be aware of the need for constant attention to the electrical safety aspects of the apparatus they use.

- They can look for cracks in power cord insulation, broken receptacles and plugs, etc. and report such deficiencies to the proper authorities.
- Any electrical equipment suspected as being faulty will be removed from service until approved by the Bio medical Department for use.
- **Glassware:**
 - Broken and chipped glassware will be discarded in heavy cardboard containers for disposal.
 - Broken glassware will be swept up by using the broom, brush and dust-pan and placed in a large “Sharps” bin.

6.6 Disposal of pharmacy Material:

- Non – contaminated materials from the pharmacy will be placed in a waste containers lined with plastic bags.
- This material will be removed daily by the Housekeeping Department.
- All sharp objects will be disposed in a sharp container.

6.7 Fire Safety:

- All pharmacy employees are required to attend the fire and safety classes.
- Effective fire drills shall be held at least quarterly for each work shift, conducted at varied times, and not at the time of shift change. Individual supervisors to arrange for their staff to contact drills.
- All personnel should be trained to perform assigned tasks and should be familiar with the location of fire extinguishers and emergency exits within the pharmacy
- Each drill shall be documented, including an evaluation of the drill and the corrective action recommended or taken for any deficiency found.

6.8 Personnel Safety:

All personnel hazards and accidents/incidents should be reported to the Head of the Pharmacy Department or designee.

a. General Safety Regulations:

- Potential exposure risks are in place for pharmacy staffs who are attempting to conceive, pregnant, or breast feeding involved in the for handling chemicals and hazardous medications and staff are offered alternative work assignment.
- Long hair will be confined to the back of the head when on duty.
- Hands will be washed frequently and thoroughly.
- Smoking is prohibited in all areas of the pharmacy including the washrooms.
- Eating and drinking should be restricted to the offices and lounge area of the pharmacy.

b. Accident Prevention:

- Chairs and boxes will not be used for step ladders.
- Corridors and rooms should be entered cautiously, watching for other people and objects in the hallways.
- Hands should be kept free of oil and grease
- Sharp tools should be put away when not in use.
- Running will not be permitted in the pharmacy.

7.0 FORMS

7.1 Healthcare Event Reporting Form

8.0 EQUIPMENT

8.1 N/A

9.0 REFERENCES

9.1 CBAHI Resource Manual.