

MANAGING CHEMICALS IN HOSPITALS

Team Members

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DATE-25-11-2018

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TARGET AUDIENCE

- ▶ Laboratory staff
- ▶ Housekeeping staff
- ▶ Nursing staff
- ▶ Radiology staff
- ▶ Doctors
- ▶ Pharmacy
- ▶ Purchase and Store
- ▶ CSSD
- ▶ Front office staff

DEFINITION

Chemical hazard is a type of occupational hazard caused by exposure to chemicals or its derivative substances in hospital sector and can cause acute or long term health effects.



TOPICS

- ▶ Definition
- ▶ Types of chemicals
- ▶ Hazardous effect of chemicals
- ▶ Protecting from hazardous chemicals
- ▶ Control methods for hazardous chemicals
- ▶ Chemical spill kits
- ▶ Incident reporting SOP
- ▶ Spillage management SOP

TOPIC CONTENTS

TYPE OF CHEMICALS

- Corrosive & irritant
- Highly flammable
- Toxic
- Harmful to the environment
- Explosive
- Carcinogen



HAZARDOUS EFFECT OF CHEMICALS

- ▶ Damage skin or eyes if they come into contact
- ▶ Could cause harm if ingested or vapours are breathed in.
- ▶ Can easily catch fire and explode
- ▶ Will cause harm to living organisms if released into the environment.
- ▶ Carcinogenic

PROTECTING FROM HAZARDOUS CHEMICALS

- ▶ Keeping lids, doors or covers closed
- ▶ Do not use mouth suctioning
- ▶ Use the smallest amount of a chemical to the job
- ▶ Using available ventilation to reduce amounts of chemicals in the air.
- ▶ If exposed to a chemical and feel sick,
 - Inform supervisor
 - Follow the first aid directions in the MSDS
 - Record incident, RCA, CAPA

CONTROL METHODS FOR CHEMICAL HAZARDS

- ▶ **SOP** for Storage, Usage and Disposal
- ▶ Use of **PPE** to protect from direct exposure
- ▶ **Trainings**
- ▶ **Signages**
- ▶ **MSDS**
- ▶ **Safety programme**



- Identify hazards

- Assess the risks

- Control exposure

CONTROL METHODS FOR CHEMICAL HAZARDS

❑ SAFE STORAGE:

- ▶ Separate incompatible chemicals.
- ▶ Store chemicals properly in the cabinets/shelves provided.
- ▶ Install smoke and heat detectors and fire extinguishers.
- ▶ Do not over crowd or overload shelves.
- ▶ Keep storage facilities locked.
- ▶ Labelling.
- ▶ Do not overstock



CONTROL METHODS FOR CHEMICAL HAZARDS



- ▶ PPE
- ▶ Eye wash



CONTROL METHODS FOR CHEMICAL HAZARDS

- ▶ **Chemical waste:** All waste must be segregated into categories and stored in leak-proof containers.
- ▶ **Spillage kit**
- ▶ **First aid kit**

CHEMICAL SPILL KITS

- ▶ The following equipment must be maintained in hospitals for dealing with chemical spills:
 - Personal protective equipment
 - Scoops and dustpans
 - Dry sand
 - Deactivator



INCIDENT REPORTING SOP

- ▶ **As laid down by the organization**
- ▶ RCA and CAPA to be done

SPILLAGE MANAGEMENT SOP

- ▶ **As laid down by the organisation**

FREQUENCY OF TRAINING

- ▶ **As laid down by the organization**
- ▶ **Monthly training calendar**
- ▶ **Induction training**

Thank you

 **Chemical Management Training**
- The ONLY way forward



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