



Nursing level III

NTQF III

Learning Guide-41

**Unit of Competence: Provide Palliative Care
and Maintain Mortuary Service**

**Module Title: Providing Palliative Care
and Maintain Mortuary Service**

LG Code: HLT NUR3 M08 LO1-LG-01

Code: HLT NUR3 M08 TTLM0919V2

**LO 3: Maintain the mortuary
environment**

**Instruction Sheet 1****Learning Guide #1**

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics:

- Mortuary environment
- Waste of disposal
- Maintenance and replenishing of inventory

This guide will also assist you to attain the learning outcome stated in the cover page.

Specifically, upon completion of this Learning Guide, you will be able to:

- Mortuary environment
- Waste of disposal
- Maintenance and replenishing of inventory

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 and 4.
3. Read the information written in the information “Sheet 1, Sheet 2, and Sheet 3”.
4. Accomplish the “Self-check 1, Self-check 2, and Self-check 3.” in **page -6, 9, and 12** respectively.



Information Sheet-1

Mortuary environment

3.1.Mortuary environment

Mortuary complex must be located in a separate building in vicinity to the main hospital complex so that it is not only convenient to the hospital staff but also to relatives, police and other officials who are required to visit mortuary very frequently. It is also important for the security reasons Near the pathology laboratory on the ground floor, Easily accessible from the wards, accident and emergency departments. In an area with ample natural light through windows; the windows should preferably be on the northern side. Located in one wing of the hospital preferably away from the general traffic routes used by the public. It must have a separate entrance for visitors and dead bodies.

Physical Facilities Area and Space Requirement

Space requirement varies from hospital to hospital depending upon the workload, level of care it provides and jurisdiction of medical autopsies. The access to the unit should have a covered area along with parking space for vehicles.

The mortuary and post mortem unit should consist of:

- A. Reception and Waiting area
- B. Cold room for body preservation
- C. Post mortem room
- D. Ancillary areas: Like consultant's room, conference room, prayer room, toilet and other facilities for the staff and the visitors, stores, etc.

ReceptionandWaitingArea: It is the place where the body is received and documents are verified and checked. Easily accessible & approachable Shield it from OPD/ward block areas of the hospital. Gently illuminated, warm and have comfortable chairs. Pleasantly and soberly furnished and decorated with plants and pictures, which would create a pleasant atmosphere, as the last impression of the relatives receiving the deceased is one of quite dignity in death. This area can also be used as prayer area of all religion. A lavatory also must be provided.

Cold Room for Body Preservation: It is the place where all the bodies including hospital dead will be transferred and kept prior to post mortem/autopsy or cremation. It is very essential to have an adequate cold room or sufficient number of refrigerators for storing the dead bodies, viscera etc.



Purpose- putrefaction changes are kept to the minimum and to preserve the normal appearance of the body as far as possible.

The number of bodies to be accommodated will depend upon the size and type of hospital. For preliminary planning purposes an estimate of three percent of the hospital bed holding may be taken. In Sassoon General Hospital capacity of cold room is for 32 bodies and unclaimed bodies stored for 3 days before handing over to police.

Cold room

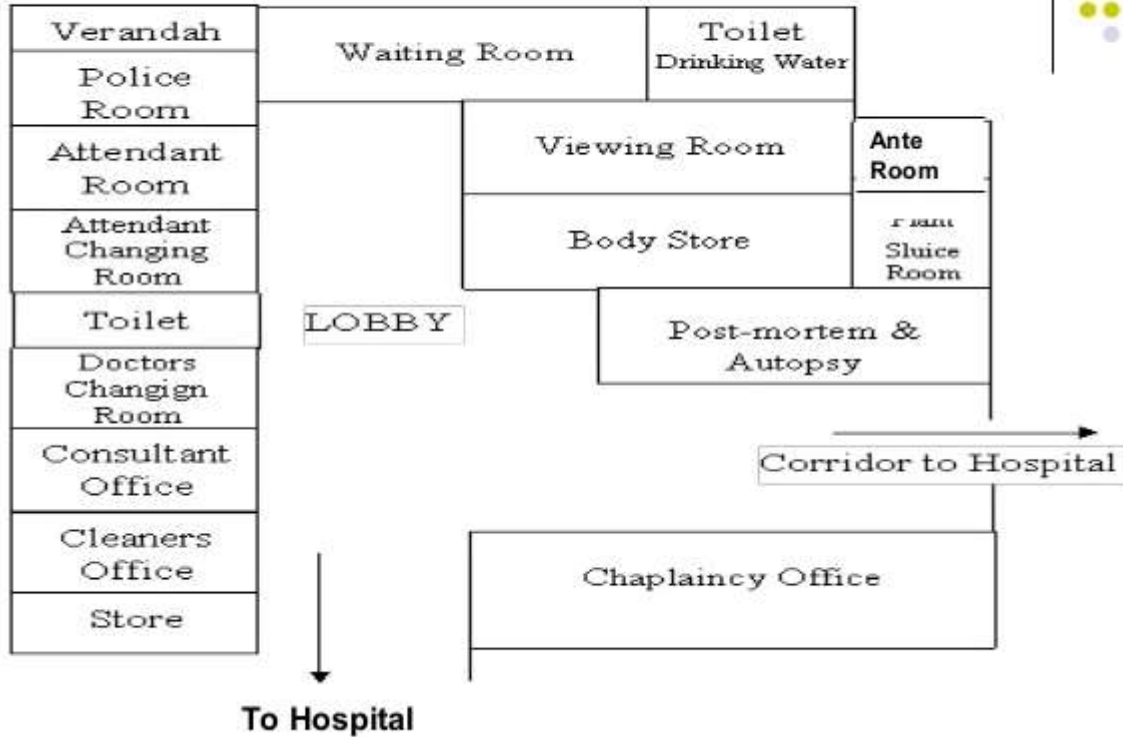
The body racks should be refrigerated, as it is not always possible to know how long a body will have to remain here. The temperature of cold rooms maintained between 5.5°C to 6.5°C, thermostat control will be required for each cold chamber. The chambers - 6 ft. wide, 8 ft. 9 inches deep and 6'fit high in which six bodies may be stored in two sets of three tiers. Cabinet doors should open on both sides to allow the attendants to approach either side of the trolley. Space is needed in front of the cold chambers for the withdrawal of trays. λ A/C Plant Room: Where more than twelve bodies are to be stored, a separate plant room 25-30 s

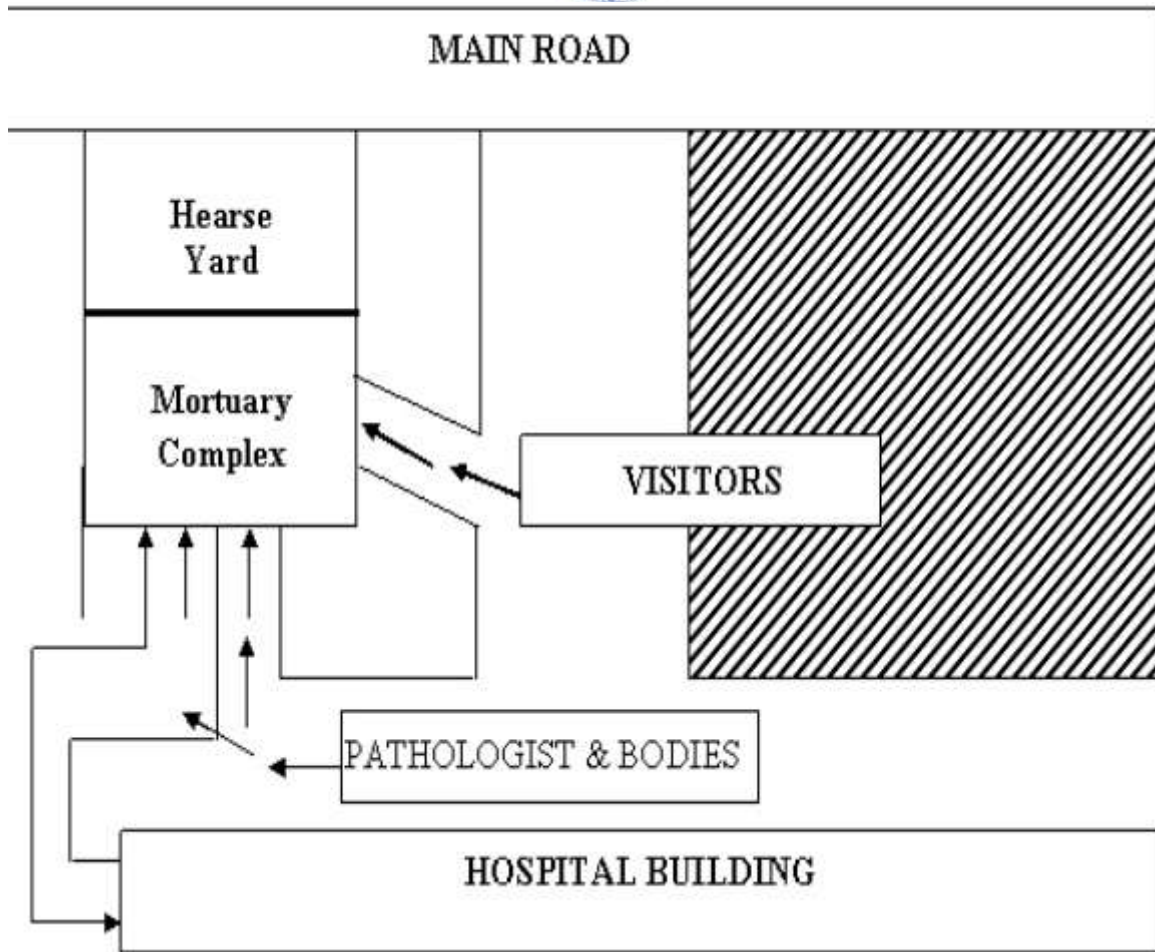


PROPOSED PLAN FOR A MORTUARY COMPLEX



ENTRANCE







Self-Check -1	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Define Mortuary environment.(4 points)
2. List out Physical Facilities Area and Space Requirement in Mortuary environment.(5 points)

Note: Satisfactory rating - 3 and 5 points Unsatisfactory - below 3 and 5 points
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____

Short Answer Questions



Answer sheet

1 _____

2 _____

3 _____



3.2. Waste of disposal

Bio hazardous waste disposal is a routine part of the work of the mortuary unit. All items in this category are to be handled with the minimum standard of protective equipment consisting of gloves, mask, and some form of arm protection either by tyvek sleeve or gown. The highest degree of risk should be assumed with all biohazardous waste due to the variety of unknown factors involved. With this in mind, proper protective measures should always be taken.

Biohazardous waste is disposed of in the following manner:

- Put biohazardous waste in a red biohazard bag
- Put the red bag in the biohazardous waste box
- Tape box closed
- Put taped box in biohazardous waste pick up location

The autopsy assistant must read the MSDS sheet for any chemicals prior to handling. The autopsy assistant must wear the following when disposing of hazardous chemicals:

- a tyvek suit
- double gloves
- an appropriate particulate respirator
- eye protection

Risk waste:

Infectious waste;

- Blood, blood products & other body fluids or items contaminated with similar fluids
- Cultures and stocks of infectious agents from laboratory & items contaminated with such agents
- Isolation wastes from highly infectious patients (including food residue
- Discarded live and attenuated vaccines
- Waste, bedding, bandages, surgical dressings, & other contaminated material infection with human pathogens

Anatomical waste

- Human tissues, body parts and fetus
- Biopsies, autopsies, carcasses, organs and tissues infected with human pathogens

Sharps waste(used or unused)



- Syringes, needles, scalpel blades, suture needles, razors, infusion sets, contaminated broken glasses, specimen tubes, etc

Chemical waste

- Formaldehyde, photographic chemicals, solvents, organic chemicals, inorganic chemical

Pharmaceutical waste

- Outdated medications, residuals of drugs used in chemotherapy

- Items contaminated by or containing pharmaceutical bottles/boxes

Radioactive waste

- Contamination with radioactive isotopes

Genotoxic waste

- Cytostatic drugs - - - -

- Vomit, urine, or faces from patients treated with cytotoxic drugs, chemicals & radioactive material

Pressurized containers

- Explosion of cylinders containing gases or aerosols



Self-Check -2	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What is difference between anatomical west and Infectious waste.(5 points)
3. List risk waste.(3 points)

Note: Satisfactory rating - 3 and 5 points Unsatisfactory - below 3 and 5 points
You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____

Short Answer Questions



Answer sheet

1 _____

2 _____

3 _____



Information Sheet-3

Maintenance and replenishing of inventory

3.3.Maintenance and replenishing of inventory

Equipment inventory is part of the management cycle of medical equipment. Inventory starts after procurement or receipt of donations and is the main input to a medical equipment management program. Inventory is a primary component of a Computerized Maintenance Management System (CMMS) and assists to organize the maintenance of equipment.

An inventory is a detailed itemized list of assets held by an organization or institution

- Must be continually maintained and updated to reflect the current status of each asset
- Depending on the nature of the organization and its assets, different details are tracked and updated as changes occur

Medical equipment inventory is a list of the technology on hand, including details of the type and quantity of equipment and the current operating status

- Accessories, consumables and spare parts inventories are directly correlated with the main medical equipment inventory

Importance of inventory

Equipment inventory is an essential part of an effective health-care technology management (HTM) system and may be used to:

- Develop budgets for capital purchases, maintenance and running costs
- Build and support an effective clinical engineering department
- Support a medical equipment management programme
- Plan the stock of spare parts and consumables
- Support equipment needs assessment
- Record equipment purchase, receipt, retirement and discard
- Support facility risk analysis and mitigation, and emergency and disaster planning

Purpose of document

- To provide an overview of medical equipment inventory for people working within the health-care field and who wish to understand the topic in greater detail
- To present the different types of inventory and the data included in these inventories
- To illustrate the role of an accurate, detailed inventory in HTM and the importance in ensuring the inventory provides useful information to support informed decision-making throughout the HTM cycle

Key elements

- Types of inventories
 - National, regional, facility
 - Medical equipment, consumables, spare parts, workshop tools & test equipment
- Items included in an inventory
 - Some facilities may include every piece of equipment
 - Facilities may establish inclusion criteria
 - Risk assessment (equipment function, physical risk, maintenance requirements, incident history)
 - Mission criticality & utilization rates
 - Facility needs & usage rates



Data included in an inventory:

- Inventory identification number
- Type of equipment/item
- Brief description of item
- Manufacturer
- Model/part number
- Serial number
- Physical location within facility
- Condition/operating status
- Power requirements
- Operation/service requirements
- Date inventory updated
- Maintenance service provider
- Purchase supplier
- Other info as needed

An inventory is effective only when it is comprehensive and accurate. Inventory is updated whenever there is any change or addition of information and during annual audits and reviews

Three stages of inventory management:

- Initial data collection
 - Information update (due to any change in information)
 - Annual audit/review
-
- Inventory may be paper- or computer-based
 - Keeping a paper-based record back-up is good practice
 - Once the inventory has been established, it can be a very helpful tool within the clinical engineering department and the health-care facility as a whole
 - Inventory can be used as a tool in:
 - Forecasting and developing budgets
 - Planning and equipping a technical workshop
 - Determining required staffing
 - Identifying training needs
 - Managing service contracts
 - Running an effective medical equipment management programme
 - Planning for spare parts and consumables orders
 - Performing needs assessment
 - Developing replacement and disposal policies and goals
 - Developing purchasing and donations goals
 - Performing risk analysis, management and mitigation
 - Planning for disasters and emergencies
 - Making a case for equipment standardization



Self-Check -3	Written Test
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Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Which one of the following is the Purpose of document
 - A. To provide an overview of medical equipment inventory for people working within the health-care field.
 - B. To present the different types of inventory and the data.
 - C. To illustrate the role of an accurate.
 - D. All
2. List out importance of inventory.(3 points)

Note: Satisfactory rating - 3 and 5 points Unsatisfactory - below 3 and 5 points
You can ask your teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____

Short Answer Questions



Answer sheet

1 _____

2 _____

3 _____



List of Reference Materials

1. http://www.who.int/medical_devices/en/
2. <mailto:medicaldevices@who.int>

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