

**Reading Material for  
MORTUARY ASSISTANT  
(Paper-A)**



**Compiled By:  
Punjab Medical Faculty**

Specialized Healthcare & Medical Education Department

Government of the Punjab

## **PREFACE**

This is the book one of the two books regarding the job description, duties, and responsibilities of a Chief Mortician and his team of Assistant Morticians and sanitary workers. This book one will elaborate the design of a mortuary, with instruments it is to be equipped with for optimal usage and maximum output.

It also covers the administrative grounds and the laws regarding the medicolegal autopsies.

At large this book one will deal with the operational capacity and work load of the mortuary.

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## **1. INTRODUCTION**

Morgue/Mortuary is a place where dead bodies are kept in the refrigerator/storage room for autopsy.

Besides this dead bodies are preserved with chemicals resulting in embalming. Dead bodies may also be kept as preservation temporarily before burial/cremation. (amantan)

The concept of a modern mortuary regards mortuary as a culturally sensitive area in terms of public relation and helping to arrange for the disposal of those patients who die.

Mortuaries occupy a special place in the perceptions of the community.

Facilities and their staff involved in mortuary services have a clear obligation to look after the deceased in accordance with community expectations.

Failure to do so is not only unacceptable but also raises valid community concerns about what takes place in mortuaries. Adherence to the Standards and Commentaries set out in this document will inspire confidence in this essential component of any health and justice systems.

Many of the Standards and Commentaries relate to the design, construction and provision of services, e.g. water supply, storage and electricity, and it is strongly advised that they are implemented where new mortuaries are being designed as they represent world best practice.

### **1.1. The mortuary broadly serves the following purposes**

To keep the dead body till the relatives claim and take over the body for disposal.

To keep unclaimed bodies until disposal (burial or cremation) is arranged by the hospital authorities along with state and NGOs.

It also allows viewing and identification by relatives, police and other people.

To receive dead bodies requiring pathological postmortems pending final disposal in some countries.

To receive dead bodies brought to the Mortuary for medicolegal/ postmortem work and store in the mortuary pending further disposal.

The Hospital Mortuary is a facility for the viewing and/or identification of a body and the temporary holding / storage of bodies prior to examination. The needs of hospital staff, relatives of the deceased and attendant authorized persons should be considered in the design, layout and functionality of the unit to provide a safe and private environment. The design must address the following:

- Number of bodies to be stored;
- Method of storage i.e. refrigerated cabinets, cold room, freezing capacity;
- Separation of entries for families to view/identify bodies, and

- Delivery of bodies from inside the hospital and external delivery (if applicable).

Mortuary assistant is at present the most skilled desirable status in the postmortem examination without him a smooth working is practically not possible.

A well learned, skilled technician is the need of the time which is not only mandatory for an active participation in the medicolegal work but also to cope with the increasing work load of the rising number of autopsies.

Apart from the actual postmortem work the technician has a pivotal role as an attendant to bereaved relatives as well as the police and the medical staff.

A technician has a central character in mortuary maintenance regarding the medicolegal work, health awareness and safety risks.

For such careful work the recruitment criteria of the individuals needs to be based upon conscientiousness, ambition and dedication.

Consideration should be given to the following:

- ❖ Security of bodies;
- ❖ Isolation and bariatric needs; and
- ❖ Expected length of time for retention of bodies.
- ❖ There are two types of mortuary cold chambers:
  - ❖ Positive temperature +2 to+4°C (the most common type),
  - ❖ Negative temperature -15°C to-25°C (used by forensic institutes for the storage of bodies that have not yet been identified)or post autopsy storage of dead bodies

## **1.2. MORTUARY UNIT MISSION STATEMENT**

To provide modern, timely and professional body processing and autopsy support services to the Department of Forensic Medicine and Toxicology along with facilitation of the law and order maintenance and for furtherance of justice.

## **CHAPTER 1**

### **1. THE MORTUARY**

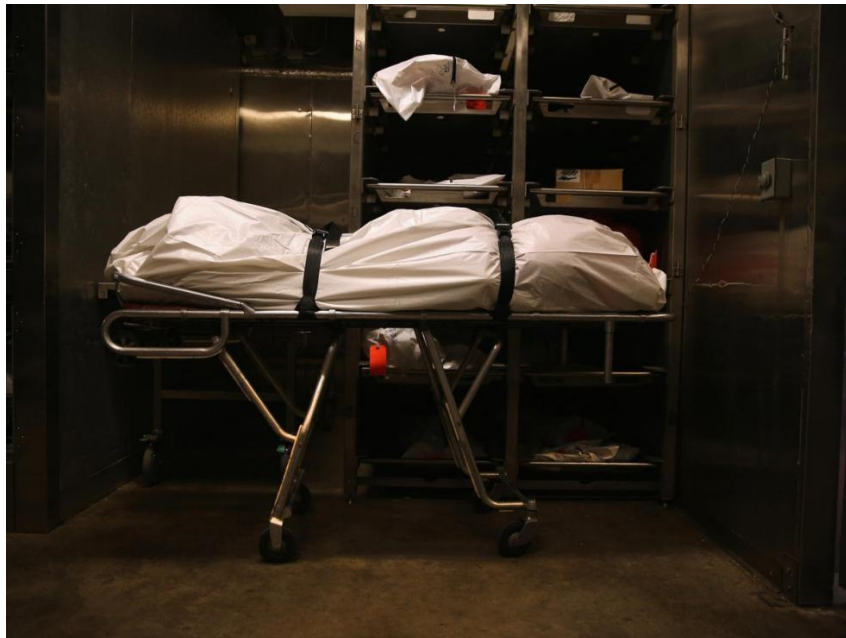
#### **1.1. Design, Equipment and Maintenance**

##### **1.1.1. The Mortuary**

As the postmortem examination is conducted in only medicolegal cases so in the major cities the mortuary are established in the Forensic Medicine and Toxicology Departments of the Medical Teaching Institutes.

Beside these mortuaries are established at District Head Quarter Hospitals, Tehsil Head Quarter Hospitals and at Rural Health Centers.

These mortuaries may vary in size and capacity depending on the work load of the area of jurisdiction of the concerned Police Station.



##### **1.1.2. Building Design**

###### **1.1.2.1. Power supply and lighting**

Power supply outlets in autopsy suits and the body storage facility must be protected from wetting by having protective covers.

Shadow-free lights should be provided for the autopsy table and dissection benches.

###### **1.1.2.2. Air-conditioning, heating and ventilation.**

The ventilation system for the autopsy suit must minimize the spread of airborne pathogens ideally by being isolated from other ventilation systems. Where ventilation systems are not isolated, exhausted air must be directed through HEPA filters.



### 1.1.2.3. Flooring

All areas must have non-slip flooring.

Wet floor surfaces must be impervious, easy to clean, sealed with covering at the edges and have adequate drainage. Floors must have drains with appropriately filtered traps.

### 1.1.2.4. Security and access:

The mortuary must have a security system which prevents access by unauthorized persons.



In a facility where medicolegal autopsies are performed, verifiable security systems must be implemented to ensure access to authorized personnel.

### 1.1.2.5. Observation Area

In a facility where medicolegal autopsies are performed, Verifiable strict security systems must be implemented to ensure access to authorized personnel.

### 1.1.2.6. Observation Area

The mortuary design should enable procedures to be observed without placing the observers at risk and without contaminating the autopsy.

In cases where there is a high risk, the number of people present at the

autopsy should be minimal.

### 1.1.2.7. Body storage

A body storage facility must be maintained at a temperature between +2 to +6°C.

Bodies must only be held in a body storage facility for a period of time determined by jurisdictional legislation or the facility's policies.

If long-term storage is required, the body should be maintained at approximately -20°C.



The operating temperatures of all body storage and freezing facilities must be monitored and charted.

The body storage facility should have adequate space for the accommodation of each body.

The facilities for body storage, transfer and dissection should be of sufficient size and strength to allow safe handling.

This should entail provision for larger and heavier bodies.

### 1.2. Body viewing area

The body viewing area must have separate public access which does not go through the autopsy suite.

The body viewing area should be separate from the autopsy theatre to avoid the possibility of visitors seeing or hearing an autopsy in progress.

A member of staff of the hospital or facility administering the mortuary should be available to provide assistance or advice.

The viewing facility should have a suitably located waiting area for relatives, fitted out in an appropriately dignified fashion, with access to washroom

facilities.

### **1.2.1.1. Autopsy theatre**

The main autopsy theatre must use only appropriate tables or trolleys. Facilities for weighing and measuring body/organs must be available within the autopsy theatre.

Medical imaging undertaken in mortuaries must comply with applicable safety and privacy standards and legislation.

The provision of height-adjustable equipment should be encouraged.

Work bays should be of sufficient size to allow staff to work in un-crowded space.

Instruments, containers and other items needed during the conduct of an autopsy should be accessible within each work bay. Facilities for photography are recommended.



### **1.3. Body reception and release**

A clerical area must be provided with a registry for recording details such as:

- a) Time and date of receiving and releasing the body
- b) Name and signature of person delivering and accepting the body upon release
- c) Details of deceased, including personal effects





Information about known or suspected risks such as radiation, infectious or hazardous chemicals must be communicated by lodging officers, person(s) requesting the autopsy and to relatives in such a fashion as legislated.

**Bodies must only be released from the mortuary with the appropriate approval as stipulated in the Mortuary Procedures Manual or by the Coroner.**

- i. An authorized person from the facility must be present at the handing over of the body to ensure the body is correctly identified and that all documentation is complete.
- ii. The Mortuary Procedures Manual should specify the categories of staff who are authorized to receive or dispatch bodies.

**The mortuary must have a system that logs the movement of bodies to and from the mortuary.**

- i. All mortuaries should include a body preparation room which should be large enough to examine the body on a trolley and permit movement of the trolley.
- ii. Persons authorized to receive dead body should have their access of the mortuary shielded in such a manner as to prevent body transfer being seen by the public or hospital patients

Bodies suspected of having infectious diseases must be contained within a body bag of approved construction which is durable and impermeable to body fluids.

Body bags must be used in cases of infection, decomposition, trauma or suspicious deaths.

An indelible label which records the full name of the deceased and at least two other identifiers must be fixed directly to the body and also to the body

bag or shroud.

Procedures should ensure that both labels are identical.

#### **1.4. Special Autopsy suites for high-risk autopsies**

Cases designated high risk includes those with a known or suspected infectious disease such as HIV, Hepatitis B and C, Tuberculosis and Meningococcal septicaemia.

In circumstances where there is an increased possibility that an infectious disease may be present, such as in intravenous drug use or unsafe sexual practices, the autopsy must be regarded as high risk even if serological testing is negative.

The Mortuary Procedures Manual must contain detailed instructions for the additional procedures to be implemented for each of these circumstances.

The presence of known or suspected high risk infections should be notified to the mortuary staff prior to commencement of the autopsy.

Autopsies presenting possible or known high risk hazards must

- a) only be performed in facilities by appropriately trained staff
- b) Using autopsy facilities which minimize the possibility of
- c) Transmission of infection from the body to staff involved in the procedure.

#### **1.5. LOCATION**

Mortuary complex must be located in a separate building of vicinity 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 must have a separate entrance for visitors and dead bodies, preferably away from the general traffic routes used by the public and in an area with ample natural light through windows; the windows should preferably be on the northern side of the building.

#### **1.6. Planning Consideration**

##### **1.6.1. Location**

***The mortuary and postmortem unit should consist of:***

- a) Reception and Waiting area
- b) Cold room for body preservation
- c) Postmortem room
- d) Embalming room
- e) Ancillary areas: Like consultant's room, common room, conference room, offices, toilet and other facilities for the staff and the visitors, stores.

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

#### **1.7. Physical Facilities Area and Space Requirement:**

##### **1.7.1. Entrance Ante-room:**

### 1.7.1.1. Easily accessible:

It is the place where the body is received and documents are verified and checked. It should be completely shielded from the reception waiting area and should be on the back side.

### 1.7.2. A Reception and Waiting Area:

Lavatory also must be provided in this area. This area can also be used as prayer area of all religion. 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 quiet dignity in death. Gently illuminated, warm and have comfortable chairs.

### 1.7.3. Embalment Room:



It is the place where all the bodies will be transferred and kept prior to postmortem/autopsy or cremation. For a capacity cold room for 32 bodies and unclaimed bodies stored for 3 days and beyond before handing over putrefaction changes can be kept to the minimum to preserve the normal appearance of the body as far as possible by chemically embalming the bodies using either arterial or injection method. This area should be well ventilated with high rise windows and well illuminated. Vacuum extractor to minimize chemical fumes must be installed. Slabs where bodies are kept for this procedure should also be constructed. Trolleys and stretchers are needed in this area. Mortuary tables with washing and drainage facilities (preferably of stainless steel with arrangements for allowing free drainage of a constant flow of water from top to bottom.

About 150. Sq. ft. of space will be needed for each additional table. Two tables or 400 sq. ft.

It is very essential to have an adequate cold room or sufficient number of refrigerators for storing the dead bodies, viscera after chemical embalming is completed.

### **1.8. Cold Room for Body Preservation:**

Cold room and fetal cabinets A/C Plant Room in cases where more than twelve bodies are to be stored, a separate plant room 25-30 sq. ft. may be required.

Space is needed in front of the cold chambers for the withdrawal of trays.

Cabinet doors should open on both sides to allow the attendants to approach either side of the trolley.

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.

The temperature of cold rooms maintained between 5.5°C to 6.5°C, thermostat control will be required for each cold chamber.

The body racks should be refrigerated, as it is not always possible to know how long a body will have to remain here.

### **1.9. Post Mortem room:**

The room, like an operation theatre must be kept clean to protect the doctors and staff from bacterial contamination.

This is a room where the body is investigated and dissected. Size 30'x20'.

The room should be so arranged that the pathologist/forensic medicine doctor might work at two or more tables with ample space for mortuary trolley.

### **1.10. Requirements of mortuary:**

#### **1.10.1. Floors:**

Floor should be hard and durable. Moisture resistant and can be easily cleaned and sloping to a drain. Floor ducts and trenches should be avoided.

#### **1.10.2. Walls:**

- i. Thick, durable and permanent fitted with tiles making it impermeable and washable.
- ii. Suitably covered junctions between the walls and floors.
- iii. Ceilings: Made of material that can be easily cleaned.
- iv. Principal rooms' height of ceiling not less than 12 ft. and Ancillary rooms height of ceiling not exceeding 10 ft.

#### **1.10.3. Doors:**

Wide doors to allow easy passage of trolleys and equipment in the post-mortem room.

#### **1.10.4. Windows:**

- i. The mortuary should have sufficient natural light.
- ii. Windows preferably on the northern side, large with opaque glass and fitted externally with fly proof screens.
- iii. Windows sills should be at least 5 ft above the floor.

#### **1.10.5. Corridors:**

Wide to allow passage of trolleys. (Not less than 8 ft.).

#### **1.10.6. Lighting:**

The light fittings should be designed to avoid glare.

Fluorescent light must be 90 lumens having good concentrated lighting over tables with at least one having tilting mechanism.

#### **1.10.7. Heating/cooling and Ventilation:**

- i. Fans with variable speed designed to produce 10 air changes per hour.
- ii. Conventional air conditions can be mounted on the walls. (Temp 10-18°C)
- iii. Natural ventilation by windows should be adequate except in the postmortem room where a mechanical exhaust system is necessary.
- iv. Adequate supply of Hot and cold water: sinks, washbasins.
- v. All taps should be of the elbow operate type. Two sinks for clean and dirty work.
- vi. Built in cupboards for keeping instruments and equipment.
- vii. Writing desk and chairs in a clean area
- viii. Shelving for jars (and tanks under) for keeping specimens.
- ix. Trolleys for shifting dead bodies and adequate furniture.
- x. Tiered benches for observers to visualize and avoid interference.

#### **1.11. Communication:**

- i. Both internal as well as external telephone lines (as the forensic expert would always be communicating between other hospital areas as well as police).
- ii. Air conditioning: The entire mortuary complex should be air conditioned with a separate system for the autopsy and embalming room to prevent foul air permeating the rest of the area. No air should be re-circulated in the mortuary.

#### **1.12. Safety:**

- i. Emergency lighting, fire sprinklers and smoke/thermal detector in all rooms.
- ii. A fire alarm system, fire exit routes earmarked with red point.
- iii. Engineering and special services repair and maintenance.

#### **1.13. Ancillary areas:**

##### **1.13.1. Doctors Room:**

Size 100 sq. ft. This is the place where the doctor and police fulfil legal formalities and where the post-mortem/death reports are generally written or dictated on telephone or recorded on tape during the course of an autopsy. It may also be used for discussion with members of the clinical staff.

##### **1.13.2. Changing Room:**

Two separate male and female changing rooms. Separate lockers for



personal clothes and for postmortem room gowns, aprons and boots.

**1.13.3. Ante Room:**

Ante room is needed for discarding soiled garments and boots before the doctors and clinical staff returns to the changing room.

**1.13.4. Consultant lavatory**

- i. Room for the mortuary supervisor/Manager.
- ii. Mortuary attendant's and cleaner's room:
- iii. Size 100-150sq.ft

**1.13.5. Attendant lavatory**

**1.13.6. Stores**

*Three small stores (size 30-40sq.ft. each).*

- a) Clean Store: For clean gowns, aprons, rubber gloves, gumboots, towels etc.
- b) Instruments and Equipment Stores: reserve stock instruments, unused specimen jars, chemical solutions, the electric resecting saw, the portable trolley, etc. this should open directly in the post-mortem room.
- c) Chemical Store

**1.13.7. Sluice Room: (Size 50-75 sq. ft.)**

For the thorough cleansing of all instruments & equipment

**1.13.8. Specimen Room:**

(Size 120 Sq. ft.) To preserve viscera in formalin before sending to pathology department or permanent preservation

**1.13.9. Viewing Room:**

(180-120 sq.ft) used by relatives of the deceased.

This chapel must not be cramped, as space is necessary for turning body trolleys, coffins, etc. at the outset

**1.13.10. Lobby: (Size 150sq.ft.)**

Required to prevent direct observation into the body store.

**1.13.11. Fore said Radiology Section:**

Portable machines and facilities of view box for viewing X-ray films.

**1.13.12. Forensic Photography Section:**

Scaled colour- photography' and sketching on the pictorial chart/Trauma-gram will be highly informative and aiding better interpretation.

Photo documentation can be very useful as an adjunct to hand written records and sketches.

### **1.13.13. Medical Observation Room:**

(Size 70-150 sq.ft.) – To allow clinical staff to attend autopsy without changing.

It may be in form of gallery or room, separated from the postmortem room by a full-length glass-viewing panel above worktop height, would allow adequate observation & discussion.

### **1.14. EQUIPMENTS:**

#### **1.14.1. Basin**

All taps should be of the elbow operate type.

#### **1.14.2. Weighing machines.**

For weighing bodies, organs and foetus with top loading tray up to 500 gram and up to 5kg.

- a) a. Platform scale for weighing the whole body-1
- b) b. Balance to weight 100gms to 10 kg-1
- c) c. Balance to weigh 0.2 gms to 10gms -1

#### **1.14.3. Scissors (stainless steel)**

- a) Scissors; blunt sharp 8" - 1
- b) Scissors; blunt/sharp 6" - 1
- c) Scissors; dissecting 5" with one probe point for coronary artery - 1
- d) Scissors; bowel, Bernard 11" -

#### **1.14.4. Forceps (stainless steel)**

- a) Bone cutting forceps 10" straight-1
- b) Bone cutting forceps 10" angled-1
- c) Rib-shears 9-1/2" -1
- d) Dissecting forceps 6"-1
- e) Dissecting forceps 8"-
- f) Dissecting forceps 10"-1
- g) Toothed and um-toothed forceps-6 each

#### **1.14.5. Post-mortem Scissors:**

- a) Saw, Bernard 11" stainless steel Blade-1
- b) Saw, Bernard 9" stainless steel Blade-1
- c) Straight and curved Enterotome, viscrotome- (1)each



### 1.15. Miscellaneous:

- a) Coronet stainless steel-1
- b) Needles, post-mortem half curved & double curved-1 dozen
- c) Probes silver with eye 10"-1
- d) Chisel, straight 3/4 " blade-2
- e) Chisel, spine with locating point (stainless steel)-1
- f) Gouge, 3/4" blade, stainless steel-1
- g) Hammer with wrench stainless steel -1
- h) Measures 12" stainless steel -1
- i) Mallet, boxwood with metal bands-1
- j) Small table 20" x 24" x 12" for dissection of organs-1
- k) Measuring jug (one litre)-1
- l) Metal/steel scale-2
- m) Magnifying glass-3
- n) Instrument trolley-3
- o) Cabinet-1
- p) Wooden boards-3
- q) Rubber gloves -Adequate quantity
- r) Aprons -Adequate quantity

**However the following additions are also recommended by some of the authorities:**

- i. Suction Pump & Aspirators-1each
- ii. Body Scale-1
- iii. Repairing materials like:
- iv. Thread white, cotton wool (absorbent), wool waste, a variety of discarded clothes, malleable wire, Polythene bags, Gloves, Masks, and Aprons etc.
- v. Plastic Bins: For fixing large specimens

### 1.16. CHEMICAL AND REAGENTS:

- i. Na hypochloride
- ii. Bleaching powder for cleaning mortuary table floors, etc.
- iii. 2% Glutar-aldehyde for cleaning instruments.

- iv. NaOH
- v. 10% Formalin for preservation of viscera
- vi. Rectified and Methylated spirit as preservative
- vii. Thymol crystals
- viii. NaCl
- ix. Sodium fluoride
- x. Potassium oxalate
- xi. EDTA vials and tubes
- xii. Sterilized glass tubes (plain & with swabs)
- xiii. Sealing wax etc.
- xiv. Big size envelope, plain papers etc.

**During the course of work associated with autopsy practice and embalment, the pathologist and his staff encounter a number of biohazards.**

The best way to reduce risk is to prevent exposures from occurring by

- 1. Adhering to strict safety precautions and use of appropriate PPE
- 2. Developing proper autopsy technique
- 3. Using proper instruments and equipment's
- 4. Proper handling and disposal of medical waste

The ideal autopsy and embalment suite is well ventilated with negative airflow exhaust system.

The entire autopsy area and its contents are designated a biohazard area and posted with appropriate warning signs

### **1.17. UNIVERSAL PRECAUTIONS**

- i. Eye protection (goggles)
- ii. Masks
- iii. Caps
- iv. Plastic disposable aprons
- v. Gowns
- vi. Personal protective equipment (PPE)
- vii. Puncture resistant hand protection (plastic or steel gloves) - prevent blood born transmission Double gloves (latex, PVC)
- viii. Shoe covers or footwear restricted to contaminated area, face shields)
- ix. Aprons
- x. suits & gowns
- xi. Gloves
- xii. Boots Safety & hazard signs

Key factor which would influence the successful outcome of the project would be close interaction of forensic and pathology staff, architects, engineers and builders



## **Chapter 2**

### **2. MORTUARY ADMINISTRATION**

The mortuary staff shall be supervised by the Head of Department of Forensic Medicine and Toxicology/medical superintendent and it shall comprise on

#### **2.1. STAFFING AND DUTIES**

- i. Mortuary Manager (Oversee the general running of the Mortuary)
- ii. Pathologist Specialists (for autopsy services)
- iii. Histopathologist/Post Mortem scientist (for preparation of reagents training of morticians and technical services)
- iv. Postmortem Assistant (assists the pathologist in autopsies and delivers samples to lab scientist)
- v. Clerk /Receptionist/Data processor. (To maintain record)
- vi. Morgue attendants (To perform emballment services and errands in the morgue; assist in photography on receipt of bodies). This is important to ensure that bodies are not wrongly delivered and to differentiate between MLC and non-MLC bodies
- vii. Sweeper/Cleaners (To keep the Mortuary clean round the clock)
- viii. Ambulance driver (for services)

#### **2.2. THE DETAILED STAFF AND ITS JOB DESCRIPTION:**

1. One Chief Mortician
2. Four Assistant Morticians
3. Four Sanitary workers

#### **2.3. The job description of the Chief Mortician shall include**

- i. Maintenance of the mortuary and the Autopsy Room
- ii. Assisting the Medical Examiner in Postmortem Examination
- iii. Supervising the Assistant Morticians
- iv. Training the Assistant Morticians
- v. Appointing Administrative duties of the Assistant Morticians and the sanitary workers
- vi. Record keeping
- vii. Identification of the dead bodies
- viii. Handling the personal effects of the dead bodies
- ix. Relation with the relatives
- x. Relation with Police

## **Chapter 3:**

### **3. LEGAL CONSIDERATIONS**

The legal framework operational in Pakistan mainly authorizes the Police Department to handle the medicolegal cases, however the honorable courts and the

State can order the medicolegal proceedings as and when deemed necessary.

The maximum work load of a mortuary comprises of the medicolegal work for which the legal prerequisites should be thoroughly verified and implemented.

A very minimal amount of dead bodies received in the mortuary is for the preservation purpose only where the dead bodies are kept for a few days till the burial arrangements by the relatives.

#### **The legal requirements to be fulfilled by the Chief Mortician/ Assistant Mortician are as follows:**

1. The complete documentation of the dead body being received in the Department by the Police which shall include the detailed bio-data of the deceased along with the jurisdiction of the Police Station and apparent cause of death.
2. In case of Postmortem examination the following documents are mandatory for the Mortician to be completed:
  - i. Police Docket
  - ii. First Information Report (F.I.R)
  - iii. Inquest form A (in case of natural death)
  - iv. Inquest form B (in case of unnatural death)
  - v. Inquest form C (in case of death by poisoning)
  - vi. Injury statement
  - vii. Medicolegal certification (if any)
  - viii. Death Certificate (where applicable)

From The Superintendent of Police,  
Model Town Division, Lahore.

To The Chairman,  
Department of Forensic,  
Medicine King Edward,  
Medical University, Lahore.

No. 4379 /HC-SP-MT Dated: 21-12-19

Subject: CASE D.D NO. 10 DATED: 9-12-19 U/S: \_\_\_\_\_  
P.S. Naseerabad 19

Memorandum:

Dead body of Un-known s/o or d/o Un-known  
r/o Un-known Is sent herewith under police escort of  
Constable Imran No. 8552 and Constable Rahim  
No. 18121 for Postmortem Examination and Report about the Cause of his/her death.

Superintendent of Police  
Model Town, Division, Lahore

735  
39/12/19  
Time 12:30 p.m.  
Dept. of Forensic Medicine,  
K. E. M. University, Lahore

3. In case of an accidental death if Police Officials want to hand over the decedent to the relatives after all the legal requirements then all the documentation is to be maintained by the mortuary staff

انسانی اطلاعی رپورٹ نسبت یکم قابل دست آمداری پولیس رپورٹ شدہ زیر دفعہ 159 مجموعاً ایل قید براری  
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تاریخ و وقت رپورٹ مورخہ 26 دسمبر 1919 بج 3:30 صبح  
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تاریخ و وقت رپورٹ مورخہ 26 دسمبر 1919 بج 3:30 صبح  
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2005-N-27-27

نمبر 25-25-2005

سپورٹ مرگ مرگ غیر طبیعی بذریعہ تشدد

تھانہ عدم فدا آباد  
مورخہ 24/05/05

سپورٹ مرگ نمبر

1- نام مقام جہاں مرگ واقع ہوئی۔ یا نعش برآمد ہوئی رکھول کے بیان کرو،	رہا آباد علی 13 مارچ 3۔
2- حاصلہ دسترس اس تھانہ سے جس کے علاقہ میں مرگ قوت میں آئی یا نعش برآمد ہوئی	قائب جنوب ازسکانہ وفا محلہ 3 مورخہ میدر قبرہ رہا آباد
3- وقوع موت کے معلوم ہوئی تاریخ اور وقت	مورخہ 24/05/05 بوقت 12 بجیں
4- نام دولہت و سکونت و زیادہ اشخاص کی جو نعش کی شناخت کریں کہ نعش مذکورہ نعش تذکرہ رپورٹ کی ہے۔ نوٹ۔ رشتہ داران متوفی یا دو سزا گواہان شناخت اگر ممکن ہو تو حاصل کرنے چاہئیں۔	1- جلاشرف ولد محمد اکرم ذات آرائیں سکنتہ 24/05/05 مدرقا آباد 2- محمد سلیم ولد محمد یوسف ذات آرائیں سکنتہ علی 13/05/05 ناہار علی محمد
5- نام دولہت و قومیت و سکونت و حیثیت متوفی	عبدالرزاق ولد محمد رمضان ذات آرائیں سکنتہ علی 13 مارچ مورخہ رہا آباد۔
6- عمر مرد یا عورت	بمیر 35 سال - مرد
7- حالت پارچہ جات پوشیدگی و زخموں اور زخموں اور زخموں اس امر کے کہ آیا اشیا مذکورہ بریکٹی سے آئاری گئی ہیں یا خون یا کسی اور چیز سے آلودہ ہوئے یا نہ ہونے کی نشانات نوٹ۔ اگر سول سرجن یا دیگر طبی کا نعش کے امتحان کیلئے انتظار ہو تو کیفیت مذکورہ بالا جہاں تک سائنس ہو سکے کہ جو کچھ یا آثار کسی چیز کے درج کر دی جائے اور اس صورت میں کیفیت مذکورہ موصوف کے امتحان نعش کے بعد ممکن کر دینا چاہیے۔	1- سولر پوشیدگی رنگ گرس خون آلود۔ 2- طبی پوشیدگی رنگ گرس خون آلود۔ 3- بنیان رنگ سفید نیر باز خون آلود۔
8- وضع اعضا و چشم دہن	سند۔ آنکھیں بند۔
9- چہرہ کا طور	مردنی چھاتی ہوئی۔
10- ضربات یا نشانات جو نعش پر موجود ہوں زخم و خراشیں ان کا موقع و جہاں و طرز تحریر کرنا چاہیے۔ نوٹ۔ اگر زخمی درج کر دہنوں میں کوئی چیز چھوڑنا منع ہے۔ سول سرجن یا دیگر طبی کے نعش کے امتحان کے لئے انتظار ہو تو کیفیت مذکورہ موصوف کے امتحان کے بعد درج کی جائے۔	1- زخم خونچاں جالیں سہل کے نیچے۔ 2- زخم خونچاں چھاتی پر دائیں طرف۔ 3- زخم خونچاں سائے بیٹ پر ناک کے نزدیک۔ 4- زخم خونچاں گھر پر چھاتی طرف درمیان میں۔ 5- زخم خونچاں بائیں کوبہا کے اوپر۔
11- خون رقیق ہے یا بھکھکس ہوئے نکلا اور کس قدر نکلا	خون رقیق۔
12- کس طریق یا کس سول یا آلہ سے نشانات ضربات یا نشانات مذکورہ لگائے ہوئے معلوم ہوتے ہیں۔	بذریعہ اسلحہ آتشیں۔
13- کیا کوئی رسی یا دیگر شے گردن میں بندھی ہوئی تھی یا گردن پر کسی شے کے بندھے نشان ہے؟	NIL. 04127/05







Govt. of Punjab Health Department  
MEDICO LEGAL EXAMINATION CERTIFICATE

Name: FAYYAZ SHAHEEN Caste: COMBOTH  
Son/Daughter/Wife of: M. SADIQ  
Age & Sex: 30Y/M Occupation: CONSTRUCTION  
Address: H No 7-A, St. No 9, Upper Jamia Nizam, Moh. SAMANABAD, LAHORE.  
NIC No: NA

Two identification marks:  
(1) Scars marks on FOREHEAD  
(2) Mark on NECK  
Accompanied by: SOHAIL (NEIGHBOR)  
Date & Time of (a) Arrival: 12/11/16 12:35 PM  
(b) Examination: 12/11/16  
Name & No. of Police Constable: Azhar Memon 16  
Admitted date & time of (a) Admission: 3-11-16  
(b) Discharge: \_\_\_\_\_  
Date & time of Report sent to Police: 17/11/16  
If accompanied by Police: \_\_\_\_\_

میں معاینہ کیا جان کر کہ اگر کوئی ہون کر میں نے اس سے پہلے پتہ لگانے کے لیے  
کا جسمانی ماہر معائنہ کر کے اس میں اس کا ملاحظہ کیا  
کی اجازت دیا جاتی ہوں جس کے بارے میں معائنہ ہو گا کہ وہ کیا ہے  
میں نے تم کو اہل اور متعلقہ درست تانے ہیں۔  
دفعہ: \_\_\_\_\_  
نام: \_\_\_\_\_  
محل: \_\_\_\_\_

Note: In cases of sexual assault, samples should be sent for DNA test.  
S. SHAIKAT NOOR PRINTERS, LAHORE  
PHONE: 042-37244954

COD# 5097009 By court order of ZILL E HUMA, MAGISTRATE Sec 30,  
MODEL TOWN COVERS, LHR.

Teaching/DHQ Hospital: SIMS SHL Book No: 40 Serial No: 39 MLC No: 1522/16

Brief History: 4/10 PAJ - 1/2 hr ago  
Examination of Clothes: cream trousers having corresponding holes & blood stained  
General Physical Examination/Symptoms: A young man of average height & built well-oriented in time, place & person.

Description of Injuries (Mark the injuries on the body diagram on the back of this page)  
INJURY No 1: 1x1cm lacerated penetrating wound & inverted margins on anterior aspect of the lower 3rd of R Thigh approx 8cm above the upper border of R patella.

INJURY No 2: 2x1cm lacerated penetrating wound & inverted margins on inner & posterior aspect of R Thigh the lower 3rd of R Thigh approx 5cm above R knee joint.

Surgical Notes by Dr. MUHAMMAD ARSIAN, SURGICAL UNIT - I SHC dated 16/11/16 received on 16/11/16 which reads as, "4/10 FIREARM INJURY OF Swollen R knee joint wound of 1x1cm lacerated penetrating wound & inverted margins on anterior aspect of lower 3rd of R Thigh 8cm above upper border of R patella. wound of 2x1cm lacerated penetrating wound & inverted margins on inner & posterior aspect of lower 3rd of R Thigh 5cm above R knee joint."

→ Surgical/Treatment Notes: X-ray report # 8209 dated 04-11-16 by Dr. PAIDA IFTIKHAR, consultant radiologist, SHC received on 16-11-16 which reads as, "COMMINUTED FRACTURE OF THE SHAFT OF RIGHT FEMUR & INTERNAL FIXATION seen." Hence Injury No 1 & 2 fall u/s 337 (F-V) SIX (6).

Investigations advised: \_\_\_\_\_  
Samples sent for Laboratory Examination: \_\_\_\_\_

Opinion of specialist Operation Notes / X-Ray report: \_\_\_\_\_

Nature of Injuries: KUO Possibility of fabrication if any - YES/NO  
(Qisas & Diyat Law)  
Probable Duration of Injuries: FRESH Kind of weapon used / Poison suspected: FIREARM INJURY

Final opinion for KUO Injuries (to be given within 21 days): \_\_\_\_\_

Government Fee Rs. 12985/- Received  
Medico Legal Examiner (Name & Designation with stamp)  
(DR. SAJJAD KARAKAT)  
تشان آگوشا 17-10-16

DEPARTMENT OF FORENSIC MEDICINE & TOXICOLOGY, SIMS/  
SERVICES HOSPITAL, LAHORE.

6

To  
The Radiology Department,  
Services Hospital/ SIMS, Lahore.

X-Ray for M.L.C No. 1529/16... Registration(COD) No. 5097009.  
Patient Name... TAYAB SHAHEEN... S/D/W/O... M. SADIQ  
Age... 30Y... Sex... M... Dated... 12/10/16

Advice X-Ray:-

1. RT THIGH
2. \_\_\_\_\_

8209

Identification Marks

1. Scar mark on FOREHEAD
2. MOLE on NECK

Thumb Impression.....

(DEMONSTRATOR MEDICO LEGAL)  
Forensic Medicine & Toxicology  
SIMS/ Services Hospital, Lahore.

DEPARTMENT OF FORENSIC MEDICINE & TOXICOLOGY  
SIMS SERVICES HOSPITAL, LAHORE.

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REGISTRATION (COD) NO. 5097009

MLC NO 1529 2016  
DATED 12/10/16

TO,

The Registrar,  
S-I Ward,  
Services Hospital Lahore

SUB: SUPPLY OF OPERATION NOTES.

Patient Name... TAYAB SHAHEEN... S/D/W/O... M. SADIQ  
Remained admitted in... S-I... ward on dated... 12/10/16  
Vide MLC No... 1529/16... Operation notes be requested by  
Doctor... SAJJAD... KARALIAT

(DEMONSTRATOR MEDICO LEGAL)  
SIMS SERVICES HOSPITAL, LAHORE





# Lahore General Hospital, Lahore

www.lgh.org.pk www.facebook.com/lghlahore

## DEATH CERTIFICATE

T.O.A = 6:59 am

NAME Mr./Miss./Mrs. <i>Unknown/unattendant</i>		L.G.H. Registration No. <i>4376423</i>		
Father's/Husband Name <i>Unknown</i>	Sex Male <input checked="" type="checkbox"/> Female <input type="checkbox"/>	Age <i>70</i>	Date of Birth Day Month Year	
	National Identity Card No.		Marital Status S <input checked="" type="checkbox"/> M <input type="checkbox"/> W <input type="checkbox"/> D <input type="checkbox"/>	Religion Islam <input type="checkbox"/> Christianity <input type="checkbox"/> other <input type="checkbox"/>
Address	Date of Admission Day Month Year <i>9 12 19</i>		Date of Death Day Month Year <i>9 12 19</i>	
	Identification Marks		Place of Death <i>LGH medical ER</i>	Time of Death <i>7:30 am</i>
		Name of Doctor Certifying Death <i>Dr Bilal</i>	Signature of the Doctor <i>Dr. Nasir Azam</i> PGR-Med 19 BGM 19/12/19	

### International Form of Medical Certificate of Cause of Death

CAUSE OF DEATH		Approximate Interval between onset and death
<p><b>DISEASE OR CONDITION DIRECTLY LEADING TO DEATH</b> This does not mean the mode of dying e.g. Heart failure, asthenia etc. It means the disease injury or complication which caused death.</p>	a) <i>cardiopulmonary arrest</i> due to (or as a consequence of)	<i>Pt receive BP less, Pulse less Breath less Pt is intubated CPR is given for 20 min but Pt does not revive back</i>
<p><b>ANTECEDENT CAUSE</b> Morbid conditions, if any giving rise to the above cause, starting the underlying condition last.</p>	b) <i>alcohol overdose</i> due to (or as a consequence of)	
<p><b>ANTECEDENT CAUSE</b> Contributing to the death, but not related to the disease or condition causing it.</p>	<i>to be found on autopsy</i>	

NOTE: For instruction of Filling this Death Certificate please refer to W.H.O international classification of Diseases.

- In case the Police Department wants to deposit the dead body to the Anatomy Department for academic purposes the complete documentation for the transfer of the body to the Anatomy Department is the duty of the mortuary staff.
- A detailed record is to be maintained of all the dead bodies coming to and going away from the mortuary.
- A thorough detailed record along with the photographs is to be maintained of the unknown dead bodies being brought in by the Police Department

## **CHAPTER 4:**

### **4. MORTUARY OPERATIONS**

#### **4.1. Universal Precautions**

According to the concept of universal precautions, all human blood and human blood components, and other potentially infectious materials (OPIM) are treated and handled as if known to be infectious for

- i. HIV
- ii. HBV
- iii. HCV
- iv. Other blood borne pathogens.

#### **4.2. OPIM includes the following human body fluids:**

- i. Semen
- ii. Vaginal secretions
- iii. Cerebrospinal fluid
- iv. Synovial fluid
- v. Pleural fluid
- vi. Pericardial fluid
- vii. Peritoneal fluid
- viii. Amniotic fluid
- ix. Saliva in dental procedures
- x. Any body fluid that is visibly contaminated with blood
- xi. All body fluids in situations where it is difficult or.

#### **4.3. Personal Protective Equipment**

Personal protective equipment (PPE) shall be used to prevent skin and mucous membrane contact with blood and OPIM.

*These may include the use of*

- i. Gloves
- ii. N95 masks
- iii. Protective eye wear
- iv. Face shields
- v. Shoe covers
- vi. Plastic aprons/gowns
- vii. Hair bonnets
- viii. Tyvek suits
- ix. Cut resistant gloves
- x. Laboratory coats
- xi. Additional PPE may be required depending on the particular case circumstances.

#### **4.4. Hand Washing**

Hands and other skin surfaces shall be washed with soap and water immediately after contact with blood or OPIM.

Hands shall be washed each time gloves or other PPE are removed.

#### **4.5. Notification of Transport**

*When an autopsy assistant is informed that a pick up or removal is necessary, the following steps should be taken:*

1. Print and sign the transport notification form
2. Print dead man name labels and prepare toe tag

#### **4.6. Body Pick Up and Transport**

##### **4.6.1. Departmental Protocol:**

- i. Autopsy assistants are required to remove bodies in a courteous, sensitive and professional manner under often difficult circumstances.
- ii. Any safety or security concerns should be directed to the police officer in charge.
- iii. The autopsy assistant may have to make difficult decisions on how to proceed with body removal, but should always operate with their safety and security in mind. Before shifting the body in the mortuary, the autopsy assistant shall don PPE.
- iv. **NOTE:** The autopsy assistant is not allowed to speak to news reporting agencies and the public in general on behalf of the agency.

##### **4.6.2. Intake Procedures**

*Decedent that arrives in Police Custody at the Forensic Medicine and Toxicology Department will be processed using the following intake procedures:*

1. Transfer decedent to mortuary cart
2. Obtain decedent's weight
3. The decedent's height will be taken at the time of the examination.
4. Label the body bag with all required information (i.e. Departmental case #, name, sex, race, height and weight)
5. Log decedent into the log book
6. Perform x-rays on all homicides, suicides, as well as decomposed bodies, infant/children and other bodies as directed by the ME.
7. **NOTE:** Head and Chest x-rays should be available prior to autopsy.
8. Log body in on freezer stretcher
9. Place body in body storage cooler

#### **4.7. Handling Personal Property**

While it is not departmental policy to receive a decedent's personal property, sometimes such items may arrive at mortuary with the remains. *Personal property that arrives with decedent remains shall be processed as follows:*

1. Decedent's personal property will be entered into the log book upon

admission.

2. Clothing should be described by color and item
3. Personal effects such as jewelry as well as money should be photographed and should only be removed in the presence of a ME.
4. Personal effects such as jewelry should be described in non-valuable terms. Example “yellow metal” or “colored stone”
5. Money should be entered into log book in the following manner:
6. Item - cash bill  
Description –  
currency
7. Quantity – number of like bills
8. All personal effects will be transferred to the safe by a ME as soon as possible.

#### **4.8. DETAILS OF THE MORTUARY LAYOUT AND FUNCTIONALITY**

A mortuary is a facility for viewing, identification and temporary holding or storing bodies of deceased, stillborn and amputated body parts. People working in a mortuary have an important and challenging role to balance delivery of an effective and efficient service with stringent procedures as well as to demonstrate respect and sensitivity for bereaved families as well as meet the needs of the clinical staff of the hospital.

##### **4.8.1. PURPOSE**

To standardize mortuary services in General and Specialized Hospitals under Pakistan Penal Code jurisdiction.

To establish minimum requirements for authorized health facilities and health care professionals to provide safe, secure, quality care, culturally relevant and sensitive mortuary services with applicable reporting to relevant authorities and ensure appropriate support, comfort, respect and sensitivity for bereaved families and carers.

To facilitate efficient release of the deceased, stillborn and amputated body parts to relatives, representatives or concerned authorities for final disposal.

To protect and prevent mortuary staff from potential exposure to blood, body fluids, and communicable diseases during transportation and handling of dead body and body parts throughout mortuary services.

##### **4.8.2. STANDARD ONE**

###### **4.8.2.1. LICENSURE AND REGISTRATION REQUIREMENTS**

- i. All health facilities providing mortuary services shall adhere to the Pakistan Penal Code Laws and Regulations.
- ii. The following licensed health facilities could provide mortuary services:

- General Hospitals (only for preservation purpose)
- Teaching Hospitals. (for both medicolegal autopsies and preservation purpose)
- iii. Hospitals opting to add mortuary services shall inform Health Care Commission (HCC) and submit an application to HCC, to obtain permission to provide the required service.

**The health facility should have relevant policies and procedure as follows, but not limited to:**

- i. Preparing the body of the deceased in the ward, before transferring it to the mortuary
- ii. Tagging the body of the deceased for proper identification  
Documentation of property and clothing
- iii. Method of transportation to the mortuary

**Record of receiving the deceased in the mortuary**

- i. Viewing of the deceased by patient's family and representatives
- ii. Care and management of patient's family and representatives
- iii. Releasing the deceased to the next of kin
- iv. Burial of unclaimed bodies.
- v. Infection control measures and hazardous waste management
- vi. Incident reporting.
- vii. Privacy, safety and security of the deceased and his/her family
- viii. Transportation of the deceased from the mortuary
- ix. Emergency action plan.
- x. Handling amputated body parts
- xi. Removal and appropriate disposal of devices and materials used, e.g. Cannula, dressings, sutures, among others.
- xii. Communicated with the family of the deceased.
- xiii. Handling the bodies of the deceased where contamination is known or suspected.
- xiv. Storage of the body of the deceased.

**Viewing of the deceased by patient's family and representatives**

- i. Care and management of patient's family and representatives.
- ii. Releasing the deceased to the next of kin
- iii. Burial of unclaimed bodies.
- iv. Infection control measures and hazardous waste management
- v. Incident reporting.



- vi. Privacy, safety and security of the deceased and his/her family
- vii. Transportation of the deceased from the mortuary
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- xi. Communicated with the family of the deceased.
- xii. Handling the bodies of the deceased where contamination is known or suspected.
- xiii. Storage of the body of the deceased.

#### **4.8.2.2. Mortuary design**

- i. Entry/exit lobby.
- ii. Body reception.
- iii. Body holding area.
- iv. Body washing area/body preparation area.
- v. Bereaved visitor's area and viewing area.
- vi. Storage and support area.
- vii. Staff area.
- viii. Entry lobby/exit lobby
- viii. The entry lobby should connect the hospital to the mortuary with an internal corridor and or elevator, for the body of the deceased to enter the mortuary with special consideration to connections to units such as the Intensive Care Unit, Coronary Care Unit and Emergency Unit.
- ix. The exit lobby should provide access to body retrieval from the body holding area to the outside, where the body could be transported in a suitable vehicle.

**Both the entry and exit lobbies should be able to accommodate the following:**

- a) Transport Trolley.
- b) Transport trolley parking.
- c) Hand washing facility.
- d) Workstation or office for body registration and removal of record

#### **4.8.2.3. BODY HOLDING AREA**

- i. Separate body holding cabinets should be provided for patients in isolation and bariatric patients, if applicable.
- ii. There shall be adequate space in front of the refrigerated body holding cabinets to manoeuvre and withdraw trays.
- iii. The minimum space requirement per body is three (3) square meters.
- iv. In hospitals handling bariatric bodies, the trays size and weight holding capacity should be accordingly.

- v. Ensure that the body holding cabinets have provision for appropriate labeling to ensure identification of the deceased person.
- vi. The temperature in the body holding cabinets should be a. Positive Temperature +2 to +6 °C. b. Negative Temperature - 15°C/-25°C (used in case of long term storage of bodies that have not yet been identified)
- vii. Temperature of the body holding cabinets should be monitored daily and documented.
- viii. In case of temperature variation, the mortuary attendant shall contact biomedical engineers/department immediately for corrective action.
- ix. Body washing area (if available)
- x. Should be located adjacent to the body holding area with a stainless steel table and an integral plumbing facility with an extendable hose in the centre of the room.
- xi. Should have a separate sink and hand washbasin. xii. Benches, waste bins and storage facilities in the body washing shall be of stainless steel material.
- xii. Waiting area and preparation/multipurpose room
- xiii. Shall be pleasant spaces and be ergonomically designed to avoid any potential injury to staff, family members and maintenance personnel.
- xiv. These areas are for family members/friends and hence shall have a discreet entry, directly from the outside, separate from the exit lobby without placing them at risks and contamination.
- xv. Unauthorized entry into the mortuary must be prevented for health and security reasons.
- xvi. Visitors and undertakers should be able to access the mortuary after operating a bell or audio-intercom at the entrance.
- xvii. Consideration should be given to the use of audio-visual intercoms, door alerts/alarms, video surveillance and remote locking of entrance doors.
- xviii. Separate male and female waiting areas shall be provided, which could have direct visibility through an internal window into the viewing area.
- xix. The waiting area should have access to male and female washroom facilities.

#### **4.8.2.4. Storage and support area**

*The mortuary should have sufficient storage area for the following:*

- a) Consumables like plastic body bags and other consumables.
- b) Lockable storage for personal effects of the deceased
- c) Storage of waste
- d) Storage of linen (clean and used)
- e) Dedicated housekeeping room for cleaning equipment, materials and

agents.

#### **4.8.2.5. Staff areas**

- i. Changing facilities with lockers for holding personal clothing and other personal items as well as stocks of clean protective garments.
- ii. Separate male and female toilets
- iii. Office (if required)
- iv. Meeting rooms (optional)
- v. There should be an appropriate vehicle to transport the bodies where the dignity of the deceased shall be considered.

### **5. STANDARD THREE:**

#### **5.1. HEALTHCARE PROFESSIONAL REQUIREMENTS**

- i. All staff including the mortuary attendants and housekeeping staff in the mortuary shall practice standard precautions and safety guidelines.
- ii. Ensure occupational health services are provided to all staff.
- iii. The mortuary staff shall be trained in effectively conducting sensitive or difficult conversations and care of handling the deceased.
- iv. The mortuary staff shall be supported to develop their skills and trained according to their role and responsibilities.
- v. They should also have an understanding of bereavement and range of mental and physical health risks involved.
- vi. A morgue attendant should perform relevant mortuary duties mentioned below but not limited to:
- vii. Provide care and support in a sensitive and respectful manner
- viii. Collect the body of the deceased, stillbirth and amputated body parts from wards and units after the attending physician completes and signs all relevant forms and documents.
- ix. Transfer the body of the deceased to the mortuary.
- x. Register all important and relevant information is entered into the registration system of the mortuary.
- xi. Place the body in the body holding cabinet and label it appropriately to ensure identification of the deceased person.
- xii. Monitor and ensure the temperature in the body holding cabinets is maintained as mentioned in the health facility requirements above.
- xiii. Immediately report any fluctuation in temperature in the body holding cabinets to the biomedical engineer or the engineering department.
- xiv. Ensure the mortuary is cleaned daily and document it.
- xv. In case of storage of an infectious body or body with a

- communicable disease, ensure cleaning and disinfecting equipment and the body holding cabinets thoroughly.
- xvi. Ensure terminal cleaning of all body holding cabinets monthly and document it.
  - xvii. Release the body of the deceased, stillbirth, amputated limbs and other body parts to the authorized party according to the hospital policy.
  - xviii. Document the handover of the body of the deceased, stillbirth, amputated limbs and other body parts.

## **6. Standard Four**

### **6.1. Management of the Body of the Deceased**

- i. The management of the hospital shall ensure that all activities following death are carried out within the legal framework.
- ii. All deaths in hospitals, death on arrival (DOA) and stillbirths must be reported to the Medical Complaints Section, by an attending physician privileged by the Medical Superintendent.
- iii. All deaths and their causes should be systematically recorded and documented.
- iv. The body of the deceased should be treated with respect, dignity while preserving its integrity and privacy.
- v. There should be a well-documented registration system for receiving, transferring and or releasing of the body of the deceased, which includes time and date, name and signature of person delivering and accepting the body.
- vi. All deceased, stillborn, amputated body parts received or transferred to mortuary must be appropriately per-wrapped, and identified by means of a tag with the patient's name and registration number before handing over to mortuary staff.
- vii. All dead bodies shall be considered infectious, strict infection control measures shall be considered during cleaning the body.
- viii. Body should be cleaned and wrapped/placed in mortuary bag to minimize leakage or chance of cross infection during transportation and handling of the body of the deceased or body parts.

#### **Ensure that body of the deceased is prepared as follows before transporting to the hospital mortuary:**

- i. Ensure that medical implants in the body of the deceased are managed as follows:
- ii. Disarm implantable cardiovascular defibrillator, pacemakers according to manufacturer's instructions, and document the activity
- iii. Dispose of implants according to manufacturer's instructions.
- iv. The body should be wrapped in linen and placed in a durable and impermeable body bag.
- v. The identification tag must be visible outside the body bag.
- vi. The body must be transported to the mortuary respectfully in a trolley.
- vii. The following documentation must accompany the body in a sealed

envelope:

a) Form for transfer and receipt of the body

b) Copy of all available identification documents.

**Ensure that specimens from the body of the deceased are managed as follows**

a) Maintain a chain of custody to ensure legal continuity

b) Use of appropriate equipment to take all specimens

c) Follow good industry practice to ensure that the integrity of the sample is maintained

d) Label and store specimens following the labeling requirements applicable for the body of the deceased and storage according to specimen requirements

e) Follow good industry practice to transport specimens, maintaining their integrity

**Ensure receipt and communication of any requested test results to the respective authorized entity (be it DHA, the police or other).**

i. Sensitive information accessible to the mortuary staff should be treated with confidentiality.

ii. The mortuary attendant should collect the body of the deceased, stillbirth and amputated parts after ensuring that the concerned physician completes the death certificate, required documents and forms.

iii. The hospital shall place high priority on the care and management of family or close ones of the deceased.

iv. The family members or close ones of the deceased, wishing to view the body should be received respectfully and their rights, responsibilities, confidentiality and privacy should be considered.

v. The aesthetics and appearance of the body of the deceased should also be considered.

vi. Ensure that the relevant mortuary policies and procedures are communicated with the family of the deceased.

vii. Ensure processing the body of the deceased within established time frames.

**Complete records of the following shall be maintained:**

viii. Registration of bodies received in the mortuary and transported out of the mortuary.

ix. All specimens and evidences taken from the deceased.

x. All specimens forwarded to other laboratories.

xi. All relevant reports (e.g. laboratory results)

- xii. All movement of record or reports out of the mortuary services office.

**Mortuary services must apply the following requirements for the identification of the body of the deceased and management of personal effects:**

- i. Attaching two identification tags immediately upon identification, where possible to the right wrist and left ankle with the following information fields completed:
- ii. Name of the deceased
- iii. Ward of the facility, or the last site at which death occurred (such as ambulance, road, etc.)
- iv. Nationality of the deceased
- v. Date of birth and/or age of the deceased
- vi. Date and time of death
- vii. Identification number issued by the facility mortuary.
- viii. Use uniform identification number for all documentation associated with a body, including on the death register.
- ix. Manage the personal effects of the deceased by removing, identification and labeling, recording and storage of all personal effects belonging to the deceased and documenting evidence of return of personal effects to family of the deceased (or handling by the police with the required records/documentation, where the case is identified as 'police case').
- x. Have in place and follow safe procedures for the removal and appropriate disposal of devices and materials used, e.g. cannula, dressings, sutures, among others.
- xi. Implement special precautions and procedures for handling the bodies of the deceased where contamination is known or suspected.
- xii. Have documented procedures for storage of the body of the deceased and ensure that these procedures are implemented and monitored.
- xiii. Ensure that there is a policy for handling amputated body parts to assure proper management of the amputated body parts.
- xiv. Visit the main morgue within the hospital to follow-up on the amputated body parts preparation and collection procedures.
- xv. Fill and sign "Receiving the amputated body parts" form at the hospital so that he/she vows to collect the amputated body part(s) within seven (7) days; otherwise, DHA is authorized to pursue burial procedure without incurring any liability.
- xvi. Receive the Burial Permit to bury the amputated body parts in or the Cremation Permit to cremate the amputated body part after completing the required procedures.
- xvii. Provide a No-Objection letter from the concerned police department if the case requires police investigations, stating that there is no objection from their side to collect the amputated body part for burying or cremating purposes.

- xviii. The recipient should provide recognized identification document proving the identity of the concerned recipient (the relative of the patient or injured person) and a medical report from the treating physician mentioning the reasons for amputation.
- xix. The body of the deceased, stillbirth, amputated limbs and other body parts must be handed over to the next of kin, concerned relatives, authorities or representatives after all required documents are completed.
- xx. All infectious cases should be handed over to municipal committee for final disposal with coordination from relatives.
- xxi. Unclaimed bodies could be kept for a maximum of four (4) weeks before contacting the relevant police.

## **7. STANDARD FIVE**

### **7.1. Management of Bodies with Infectious or Communicable Diseases**

- i. Bodies with infectious or communicable diseases (e.g. COVID 19, Ebola Virus Disease, etc.) may pose a risk when handled by untrained personnel.
- ii. To ensure appropriate management of these bodies the mortuary staff should comply with the following:
  - The health facility should have a protocol for the management of bodies with infectious or communicable diseases.
  - All mortuary staff should be trained on standard precaution and infection control measures required to handle bodies with infectious or communicable diseases

#### **The requirements for preparing and packing the body for transfer from a patient room to mortuary are as follows:**

- a) The mortuary staff attending to the dead body shall follow standard precaution such as perform hand hygiene, ensure proper use of Personal Protective Equipment (PPE) like, water resistant apron, goggles, N95 mask, gloves.
- b) The number of mortuary staff handling dead body with infectious or communicable diseases should be limited to limit the exposure.
- c) All tubes, drains and catheters on the dead body shall be removed.
- d) Any puncture holes or wounds (resulting from removal of catheter, drains, tubes, or otherwise) should be contained with dressing.
- e) The movement and handling of the body should be kept to a minimum.
- f) There is no need to disinfect the body before transfer to the mortuary area.
- g) The body should be wrapped in a plastic sheet, a linen sheet and then placed in two leak-proof plastic body bags (Cadaver bags).
- h) Health workers handling the body at this point should use PPE (surgical mask, clean gloves and isolation gown).
- i) If the family of the deceased wishes to view the body at the time of removal from the isolation room or area, they may be allowed to do so

with the application of standard precautions and should wash hands thoroughly with soap and water after the viewing.

- j) The family shall not touch, kiss or hug the body of the deceased.
- k) Adults > 60 years and immune-compromised persons shall not be allowed in close proximity to the body.
- l) No special transport equipment or vehicle is required.
- m) The trolley carrying the body shall be disinfected with approved hospital disinfectants (e.g. 1% Hypochlorite solution, quarterly ammonium chloride etc.)
- n) The body of the deceased should be stored in cold chambers maintained at approximately 4°C.
- o) The mortuary shall be kept clean. Environmental surfaces, instruments and transport trolleys should be properly disinfected with approved hospital disinfectants.

**The requirements for preparing and transferring the body from mortuary to graveyard are as follows:**

- a) The body of the deceased should be prepared for burial in mortuary department of the health facility and shall not be taken to the house.
- b) The body washing shall be done only at public washing places with open spaces, by trained and competent personnel, with appropriate equipment wearing appropriate PPE (gloves, mask, gown and face shield).
- c) A maximum of two (2) family members could be present at the washing service and they should be wearing full PPE with precautions.
- d) Anyone involved in the body washing process should thoroughly wash their hands with soap and water, when finished.
- e) The family of the deceased should be instructed to limit the number of people at the burial ground primarily to close family contacts, to avoid a large gathering.
- f) The belongings of the deceased person do not need to be burned or otherwise disposed.
- g) However, they should be handled with gloves and cleaned with a detergent followed by disinfection with a solution of at least 70% ethanol or 0.1% (1000 ppm) bleach.
- h) Clothing and other fabric belonging to the deceased should be machine washed with warm water at 60–90°C (140–194°F) and laundry detergent.
- i) After removing the body, the mortuary fridge, door, handles and floor should be cleaned with approved disinfectant such as 1% Hypochlorite solution.
- j) The vehicle, after the transfer of the body must be decontaminated.



## **8. STANDARD SIX**

### **8.1. Safety Management**

- i. Have documented procedures for storage of the body of the deceased and ensure that these procedures are implemented and monitored.
- ii. Use durable and impermeable body bags for storage of the body of the deceased.
- iii. The mortuary must be cleaned at least once daily.
- iv. After release of bodies with confirmed or suspected infections or communicable diseases, the mortuary equipment and body trays must be thoroughly cleaned and disinfected with approved hospital disinfectants.
- v. The body holding cabinets must be terminally cleaned and disinfected once a month.
- vi. Ensure all mortuary staff uses appropriate personal protective equipment (PPE) when handling dead bodies or body parts.
- vii. Ensure all mortuary staff performs proper hand hygiene after handling dead bodies or body parts.
- viii. All equipment and instrumentation must be properly decontaminated, calibrated, routinely inspected for safety and functionality to minimizing potential hazards.
- ix. Mortuary equipment must be routinely maintained in accordance with manufacturer specifications.
- x. All repairs and maintenance must be accurately documented.

## **GLOSSARY OF MEDICAL TERMS**

- i. Deceased: Is a patient/person who has recently died.
- ii. Health care professional: Is a health care personal working in health care facilities and required to be licensed as per the applicable laws in Pakistan.
- iii. Mortality management: Shall mean to care of the family and the deceased after death.
- iv. Mortuary: Is a facility for the viewing and/or identification of a body and the temporary holding/ storage of bodies.
- v. Patient: Shall mean any individual who receives medical attention, care or treatment by any health care professional or admitted in a health facility.
- vi. Personal effects: Are privately owned items (such as clothing and jewelry) normally worn or carried on the person

### **Mortuary**

means a facility, one or more rooms or a building, which is used for the storage of bodies, including a refrigerated body storage facility and may include, body viewing area, body preparation room and an autopsy suite

### **Autopsy Suite**

means a facility, attached to a mortuary, which is used for the performance of investigations into the cause of death. It comprises an autopsy theatre, change room and observation area

### **Autopsy Theatre**

means a room specifically designated for dissection of body

### **Autopsy**

means a postmortem medical examination that may involve full or partial dissection of the body, imaging of the body, external examination and review of the records and collection of appropriate Specimen. Autopsies can be classified as Hospital' or Coronial'.

A hospital autopsy, or non-coronial autopsy, is an examination performed with permission from the relatives/next-of-kin.

A coronial autopsy, or forensic autopsy, is an examination performed under the law ordered by a Coroner.

### **Body preparation room**

means the part of a mortuary used for the receipt and dispatch of bodies and preparation of bodies for viewing.

### **Change room**

means a separate room within the autopsy suite used to change into autopsy

<b>Level 1 Facility (L1)</b>	<p>theatre apparel.</p> <p>means a mortuary without an autopsy suite. Examinations performed in this facility will be limited to external examination, and/or other investigations such as post mortem imaging and percutaneous needle sampling.</p>
<b>Level 2 Facility (L2)</b>	<p>means a mortuary with an autopsy suite without the infrastructure or personnel expertise to perform high risk or specialized autopsies.</p> <p>Level 2 facilities will potentially refer some autopsies to a Level 3 facility</p>
<b>Level 3 Facility (L3)</b>	<p>means a mortuary with an autopsysuite and with the infrastructure and personnel expertise to perform highrisk or specialized autopsies</p>
<b>High risk autopsy</b>	<p>means autopsies known to or suspected to pose significant infectious, chemical, biological or radiation hazards.</p>
<b>Mortuary Procedures Manual</b>	<p>means document(s) that provide(s) policies and operating procedures for the mortuary. The documents and any manual may be in hard copy or electronic formats</p>
<b>Observation Area</b>	<p>means the part of the autopsy suite that allows people not performing the autopsy to view the examination, usually with some form of barrier or separation from the deceased and allowing a different level of protective clothing.</p>
<b>Requirements for Medical Pathology Services (RMPS)</b>	<p>means the overarching document broadly outlining standards for good medical pathology practice where the primary consideration is patient welfare, and where the needs and expectations of patients, Laboratory staff and referrers (both for pathology requests and inter- Laboratory referrals) are safely and satisfactorily met in a timely manner. The standard headings are set out below –</p> <ul style="list-style-type: none"> <li>Standard 1 – Ethical Practice</li> <li>Standard 2 – Governance</li> <li>Standard 3 – Quality Management</li> <li>Standard 4 – Personnel</li> <li>Standard 5 – Facilities and Equipment <ul style="list-style-type: none"> <li>A– Premises</li> <li>B – Equipment</li> </ul> </li> <li>Standard 6 – Request-Test-Report Cycle</li> </ul>

A – Pre-Analytical  
B – Analytical  
C – Post-Analytical

Standard 7 – Quality Assurance

**Temporary mortuary**

means a temporary mortuary facility set up where there are fatalities following an emergency, disaster or epidemic or if burial or cremation is likely to be delayed.

**Body viewing area**

means that part of a mortuary that provides access for viewing of the deceased.