THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF HEALTH, COMMUNITY DEVELOPMENT, GENDER, ELDERLY AND CHILDREN

NATIONAL GUIDELINES FOR ESTABLISHMENT OF MORTUARY SERVICES

QUALITY AND DIGNITY FOR DECEDENT

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NATIONAL GUIDELINES FOR ESTABLISHMENT OF MORTUARY SERVICES

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PHOTO 1: Mortuary Guidelines Development TWG Members

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Abbreviations and Acronyms

ADDS	**Assistant Director Diagnostic Services**
ADRRH	Assistant Director Regional Referral Hospitals
BMC	Bugando Medical Centre
CoAg	Cooperative Agreement
DCS	Director of Curative Services
DED	District Executive Director
DRRH	Dodoma Regional Referral Hospital
DSS	Diagnostic Services Sections
GEMS	Guidelines for Establishment of Mortuary Services
GOMS	Guidelines for Operations of Mortuary Services
HEPA	High-Efficiency Particulate Air
HLS	Head of Laboratory Services
KCMC	Kilimanjaro Christian Medical Centre
MD	Medical Doctor
MoHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
NBTS	National Blood Transfusion Service
NHLQATC	National Health Laboratory Quality Assurance and Training Centre
NLQO	National Laboratory Quality Officer
ORCI	Ocean Road Cancer Institute
PHLB	Private Health Laboratories Board
TWG	Technical working group
UDOM	University of Dodoma

FOREWORD

This National Guideline for Establishment of Mortuary Service has been prepared by the MoHCDGEC to provide guidance on the standard requirements, functions and management of mortuary facilities aimed at quality improvement of mortuary services and healthcare in general for people living in Tanzania.

The development process adopted by the Technical Working Group (TWG) was to consolidate information from a range of sources including local and international literature, expert opinion, practice and group workshop/s into this document. The MoHCDGEC, will be responsible for the periodic review and formal update of this document and related tools.

These guidelines contain seven chapters. Chapter One describes the introduction, situation analysis of 52 mortuary services in Tanzania, which conducted during the Guidelines development period, management and administrative services, human resource, mortuary functions, infrastructure and mortuary financing. The scope of this Guideline covers a hospital mortuary, a stand-alone mortuary, and a funeral home both in public and private sectors. The guideline also covers funeral services limited to mortuary supplies and transportation; and also gives a description of a mortuary as facility or building, or a room in a hospital or a facility outside the hospital either public or private, where a dead body is kept before being released for burial or cremation and/or sometimes for investigation to determine the cause of death, as in post-mortem examination. Mortuary services, types and ranking by number per region and ranking of health centre mortuaries by numbers per regions on Mainland Tanzania.

Chapter Two gives the applicable guidance for planning, operational model, hours of operation and personnel requirements for levels I to III mortuaries and funeral homes. Guidance is also provided for mortuary functions according to level of mortuary services, model of care - body holding, types of mortuaries, whether banks of refrigerated cabinets or walk-in cold room for individual trolleys (suitable for mass death), included are considerations for types of mortuary cold chambers. For planning models, guidance is provided in mortuary functional areas such as entry lobby/administration/exit lobby, body holding area, waiting and viewing area, body storage area, staff area and functional relationships for external; for a dead body coming from outside a health facility vis-a-vie a dead body coming from within the health facility (internal).

Chapter Three gives guidance on design requirements for each level of mortuary services including accessibility from external and internal, infection prevention and control, environmental considerations such as building away from residential areas with adequate screening from public view. Considerations for interior design, acoustics (sound proofing), space standards and components, mortuary ergonomics designed for staff comfort such as Post-mortem table heights, use, access and mobility such as

body lifting equipment, safety and security for staff, visitors and stored bodies. Mortuary building must meet demands for ceiling, floor and wall finishing; including fixtures and fittings, safety showers and eye wash stations, building services requirements, air-conditioning and ventilation, alarms for intruders and system failures in the mortuary, lighting and stable power supply.

Chapters Four gives guidance on organisation and management requirements for an efficient mortuary services. Building design gives guidance the following requirements: power and lighting, air-conditioning, heating and ventilation, flooring, security and access, body storage, body viewing area, post-mortem room, body reception and release and special post-mortem room for high-risk procedure. Personnel facilities requirements give guidance on personal protective equipment and dealing with the deceased, dealing with property and clothing and chain of custody for property and samples for forensic investigations and responding to bereaved next-of-kin/relatives and body viewing requests. Guidance is also given on how to conduct of a post-mortem, reconstruction of the body, observing the post-mortem, reports on post-mortem findings and organ and tissue retention and disposal.

Chapter Five gives guidance on functional and movement relationship within the mortuary facility for both staff and especially for visitors coming for the purposes of bring a body from outside the health facility, identifying a body, attending post-examination and/or collecting a body for burial. While, Chapters Six and Seven give guidance on general requirements for those interested in opening a funeral home or parlour business such as functions for a funeral home, references and further reading materials that the TWG referenced during the development of these Guidelines. In addition, **Annexes 1-3** provide guidance on preparation of hypochlorite solutions for use in the various sections of the mortuary.

The Guidelines are to be used by those intending to establish mortuary service and/or funeral home services as well as those involved in the procurement, design, management and commissioning of mortuary facilities. It is also a "must-have" document and reference material to the private sector healthcare providers.

It is the hope of the MoHCDGEC that, the Regionalised Implementing Partners mentioned in **Figure 5** and **Table 7** will also support to improve the quality of mortuary services, with knowledge that mortuaries are part of the laboratory system. So, their support is highly appreciated. These guidelines will be used as public and private reference document and for application by MoHCDGEC in the planning, implementation and monitoring of both public and private health sector mortuary services in the country.

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The Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC) is very grateful to PEPFAR/CDC for the financial and technical support through the One-Cooperative Agreement (CoAG), which enabled the development of this Guideline for Establishment of Mortuary Services. Sincere thanks go to the DCS, ADDS and Head of Laboratory Services for identifying the critical need for improved condition of mortuaries in Tanzania.

In particular, the MoHCDGEC appreciates the technical contributions from the following institutions: Muhimbili National Hospital, Ocean Road Cancer Institute (ORCI), Kilimanjaro Christian Medical Centre (KCMC), Bugando Medical Centre (BMC), Dodoma Regional Referral Hospital, Tarime District Hospital, National Blood Transfusion Service (NBTS); Private Health Laboratories Board (PHLB), National Public Health Laboratory (NPHL), University of Dodoma (UDOM) and District Executive Directors of Ruangwa and Tarime for allowing the their staff to participate in this important activity.

I would like to commend Diagnostic Services Section under the Directorate for Curative Services for taking the technical lead towards the development of this Guideline for those intending to establish Mortuary Service in Tanzania.

Appreciations go the facilitator, who spent time, expertise and worked in partnership with government agencies, partners, technical and support staff, in the development of this guideline.

PROF. ABEL MAKUBI
CHIEF MEDICAL OFFICER

TERMS AND DEFINITIONS

For the purposes of this Guideline, these terms and definitions shall apply:

Terms	Definitions
A Work-station	refers to a surface ergonomically dimensioned for use from the seated position. This is normally 750mm high.
Anatomic pathologist	refers to a medical specialty that is concerned with the diagnosis of disease based on the macroscopic, microscopic, biochemical, immunologic and molecular examination of organs and tissues.
Autopsy	refers to a post mortem 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 samples.
Autopsy room	refers to 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	refers to a room specifically designated for dissection of the body.
Biomedical engineer	refers to an engineer/technician managing medical equipment used for diagnosis, treatment and care of patients.
Biosafety	refers to containment principles, technologies, and practices implemented to prevent unintentional exposure to pathogens and toxins, or their unintentional release
Biosecurity	refers to institutional and personal security measures designed to prevent the loss, theft, misuse, diversion, or intentional release of pathogens and toxins.
Body Cabinet	refers to refrigerated body cabinets, or refrigerated cabinets with shelves or drawers, used for storing a dead body in the mortuary.
Body display room	refers to a mortuary show room for identification of dead body or for showing last respect.
Body holding room	refers to a room for keeping the body temporarily before being prepared for autopsy or release.
Body lift	refers to mortuary equipment for lifting a dead body
Body load surge	refers to sudden increase in number of dead bodies.
Body preparation room	refers to the part of a mortuary used for the receipt and dispatch of dead body and preparation of body for viewing.
Body storage area	refers to a place where a dead body is stored.
Body storage facility	refers to equipment, tools of infrastructure used for storing a dead body.
Body storage system	refers to method of storage of a dead body in a mortuary either using a refrigerated body cabinets or cold room; or a combination of both cold room and body cabinets.

Body viewing area	refers to part of a mortuary that provides access for viewing of the deceased.
Case load	refers to the number of dead bodies stored.
Case profile	refers to a subject or individual requiring public attention or notice; or the status of the individual especially before dying.
Change room	refers to a separate room within the autopsy suite used to change into autopsy theatre clothing.
Clinician	refers to a medical doctor or medical practitioner
Containment facility	refers to the part within the demarcated zone in which the most malodorous activities occur. This facility includes the decomposing bodies' post-mortem examination room, airlock anteroom, and a decontamination unit each for men and women. The containment facility is sealed off from the rest of the demarcated area.
Cremation	refers to a method of final disposition of a ded body through burning (combustion)
Cultural concerns	refers to relating to the habits, traditions, and beliefs of a society or community.
Demarcated area	refers to the demarcated area, including the post-mortem examination rooms and all supporting functional spaces is the area where most sensitive, costly and specialized processes occur.
Dignity of deceased	refers to the principle that a body is treated with the respect and dignity befitting any person prior to death.
Disaster	refers to an event such as an accident or a natural catastrophe that cause damage or loss of life in large numbers.
Dissection room or suite	refers to post-mortem examination area or suite.
Downdraft post mortem examination table	refers to workbenches with built-in ventilation to capture dust, smoke, and fumes and draw them away from the material being worked on. They typically consist of a perforated surface whose underside is connected to a ventilation or dust collection system, to draw material through the holes and away from the work.
Ergonomic	refers to the application of psychological and physiological principles to the engineering design of products, processes, and systems to increase. Productivity, and enhance safety and comfort with specific focus on the interaction between the human and the designed product or system.
Forensic autopsy	refers to an examination performed on a body under the law to determine cause of death.
Forensic Medicine	refers to a branch of science and medicine involving the study and application of scientific and medical knowledge to legal problems, such as inquests, and in the field of law.
Forensic Pathologist	refers to medical practitioner or professional specialized in forensic pathology
Forensic pathology	refers to pathology that focuses on determining the cause of death by examining a dead body.

Funeral home	refers to (funeral parlor or mortuary) a business that provides interment and funeral services for the dead and their families. These services may include a prepared wake and funeral, and the provision of a chapel for the funeral.
Gurney	refers to a light bed on wheels, used to lift and/or move a dead body in a mortuary; or a flat table, or a light frame covered with cloth, which has wheels and is used for moving dead bodies or people who are ill or injured.
Hermetically sealed plastic body bag	refers to an air tight closed plastic body bags; or plastic bags that are so tightly closed that no air can leave or enter it.
High risk autopsy	refers to autopsies known to or suspected to pose significant infectious, chemical, biological or radiation hazards.
High risk disease	refers to a killer disease which is easily spread or transmitted, usually through air, and may have no treatment. e.g. Ebola.
Homicide	refers to the act of one human killing another. Homicides can be divided into many overlapping legal categories including murder, manslaughter and justifiable homicide e.g. killing in war.
Hopper	refers to a large tube, wide at one end, through, which large amounts of water is moved from one container to another; or used to move or slide the dead body into the cabinet.
Hospital autopsy	refers to an examination performed with permission from the relatives and/or next-of-kin.
Infant	refers to a baby or a very young child below one year old.
Inherent redundancy against failure	refers to a safety mechanism for mortuary body storage that inherently responds in a way that will cause no or minimal harm to the equipment, environment or to the dead body.
Laboratory scientist	refers to health laboratory practitioner or professional with a bachelor degree in medical laboratory sciences.
Laboratory specialist	refers to health laboratory practitioner or professional with a Master's of Science (MSc) or Doctor of Philosophy (PhD) in medical laboratory sciences.
Laboratory technologist	refers to health laboratory practitioner or professional with a diploma or advanced diploma in medical laboratory sciences.
Large scale storage	refers to storage of large number of dead bodies in mortuary.
Level I	refers to dispensaries and health centres
Level II	refers to district and regional hospitals
Level III	refers to Specialised, Zonal and National hospitals
Long term body storage	refers to storage of the dead body in the mortuary for longer periods beyond one week or seven days.
Medical Examiner	refers to is an official trained in pathology that investigates deaths that occur under unusual or suspicious

	circumstances, to perform post-mortem examinations, and in some jurisdictions to initiate inquests.
Medico-legal	refers to something that involves both medical and legal aspects.
Mortality rate	refers to death rate, is a measure of the number of deaths in a particular population, per unit of time. It is expressed as "the number of deaths per 1,000 individuals per year".
Mortician	refers to a person whose job is to prepare a dead body for burial or cremation (burnt) and sometimes to organize funeral.
Mortuary	refers to the storage of human remains awaiting identification or removal for autopsy or burial, cremation or other method.
Mortuary assistant	refers to a certificate holder, mortuary practitioner with a two-year training in mortuary disciplines.
Mortuary attendant	refers to a medical attendant with a formal in-service training to provide medical related services in a mortuary; or a person with at least one-year training in mortuary disciplines.
Mortuary layout	refers to drawing or mortuary design.
Mortuary Procedures Manual	refers to document(s) that provide(s) policies and operating procedures for the mortuary. The document and any manual may be in hard copy or electronic formats.
Mortuary technologist	refers to a diploma holder, mortuary practitioner with a three-year training in mortuary disciplines.
Natural death	refers to a death from natural causes, which are determined to have been the cause of illness or an internal malfunction of the body not caused by external forces.
Neonate	refers to a baby who is less than four weeks old.
Observation area	refers to 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.
Obstetrics & Gynaecologist	refers to the medical specialty that encompasses the two subspecialties of obstetrics (covering pregnancy, childbirth, and the postpartum period) and gynaecology (covering the health of the female reproductive system).
Pathologist	refers to an expert in the study of diseases, especially someone who examines a dead person's body and cuts it open to discover how the person died.
Pathology	refers to is the study of the causes and effects of disease or injury; or the study of disease in general.
Physician	refers to a medical practitioner, medical doctor, or simply doctor, a professional who practices medicine, which is concerned with promoting, maintaining, or restoring health through the study, diagnosis, prognosis

	and treatment of disease, injury, and other physical and mental impairments.
Post-mortem examination	refers to examination after death, which may include performance of an autopsy.
Post-mortem examination	refers to a surgical procedure that consists of a thorough examination of a dead body by dissection to determine the cause, mode, and manner of death or to evaluate any disease or injury that may be present for research or educational purposes.
Post-mortem examination area	refers to a room and its attached service rooms designed for the performing of post-mortem examinations.
Procedure related death	refers to deaths due to medical procedures such surgical operation or medical treatment.
Prosector	refers to a person who is well versed in anatomy and who therefore prepares a dead body for post mortem examination.
Refrigerated Cabinet	refers to refrigerated body cabinets, or body cabinets; a mortuary equipment with shelves or drawers, used for storing dead bodies.
Short term body storage	refers to storage of the dead body in the mortuary within one week or seven days.
Shower facility	refers to a device that releases drop of water through a lot of very small holes for irrigation or washing the body.
Sluicing facility	refers to a room or a special area with an artificial channel for carrying water, with an opening at one end to control the flow of the water used for cleaning mortuary instruments and linen.
Stand-Alone Mortuary	refers to facility offering mortuary services without being attached to hospital.
Still births	refers to a foetal death at or after 20 to 28 weeks of pregnancy, resulting in a dead baby born.
Sudden death	refers to unexpected or unexplained death happening quickly and without warning.
Suicide	refers to the act of intentionally causing one's own death.
Temporary mortuary	refers to a temporary mortuary facility set up where there are fatalities following an emergency, disaster or epidemic. Also, serves to contain spread of disease when body is moved from one place to another.
Trolley	refers to a table on four small wheels with an enclosed shelve used for serving carrying dead body.
Unexpected/unexplained death	refers to unexpected sudden death that cannot be explained or attributed to any cause of death.
Unnatural death	refers to a death falls within the accidental, suicidal homicidal, unknown *(sudden unexpected or unexplained)* and procedure-related categories, as further defined in the Regulations regarding the Rendering of Forensic Pathology Service and the Health Professions Amendment Act.
Unnatural death	refers to death that is not natural or not caused by a disease e.g. homicide or suicide.

CHAPTER ONE

1. INTRODUCTION

The Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC), has the responsibility to supervise provision of safe and quality health care practices in the country. In order to do so the MoHCDGEC ensures that all health facilities follow the policies and guidelines stipulated.

The mortuary is a place of mystery, sadness, grief or repulsion and all hope, while alive, that they will never need to visit such a place. For families who have lost a loved one to a sudden death, this becomes a reality. Working in a mortuary is an extremely stressful experience, which is made worse due to the large number of people dying sudden violent deaths due to infectious diseases, trauma and the pitiable condition of mortuaries throughout the country.

Although the management of mortuary services fall under laboratory services, currently there is no specific guideline to provide guidance on the functions, safety, security and quality management for mortuary services in Tanzania.

The purpose of this Guideline, therefore, is to give guidance to any health facility and/or person that is willing to provide mortuary services in the country. The guideline provides for the standard requirements for the establishment of a mortuary or funeral home in Tanzania.

1.1 SITUATION ANALYSIS OF MORTUARY SERVICES IN TANZANIA

Mortuary services in Tanzania, where and have continued to be overlooked compared to other healthcare services, such as preventive and curative services including diagnostic and rehabilitative services, despite. The main challenges facing mortuary services can be categorized into: a) Management and administrative services, b) Human resource, c) Mortuary functions d) Infrastructure; and e) financing.

1.1.1 MANAGEMENT AND ADMINISTRATIVE SERVICES

Government health facilities have mortuaries from National levels to District hospital levels, except for some specialized national hospitals which share mortuary services with the nearby government health facility. Currently some of the Health Centres providing emergence obstetric care, have mortuaries. On the other hand, only few private health facilities have mortuaries. The majority

have either no mortuary at all or have just a room for storage of dead bodies. Furthermore, currently, there are no stand-alone mortuaries in the private sector as it is for the autonomous private health laboratories, instead, there are several private service providers owning funeral homes. The situation analysis that involved 15 private hospitals and 37 government hospitals showed that, 3 (20%) of private health facilities, did not have mortuary facilities; while 10 (66.7%) had just a room for storage of dead bodies, without refrigerated cabinets or cold room but just a room with air-conditioning set to the lowest temperature. On the other hand, 35 (94.6%) of the government health facilities had mortuaries. The government health facilities 2 (5.4%) that did not have mortuaries were among the 5 new formed regions which upgraded health centre or district hospital to a regional hospital level (**table 1** refers).

The management of these mortuary services, whether government owned or private health facilities, vary from one health facility to another. For example, in Government health facilities, mortuaries are managed under, among other sections/departments: a) Nursing Department, b) Surgical Department, c) Clinical Support Department, d) Laboratory Department, or e) Administrative Department (Public Private Partnership). The situation is worse in the Private Health Sector, where mortuary services are managed under the Security Guard Department (under the care of the Watchman), or Nursing Department (under the care of the Matron) or the Estate Department (under the care of the Estate Officer). The situation analysis that involved 15 private hospitals, and 37 government hospitals showed that, of the 12 private hospitals that had mortuary facilities, 9 (75%) of the mortuaries were headed by the mortuary in-charge, who reported to either the matron (25%), medical officer in-charge (16.7%) or health secretary (8.3%). On the other hand, of the 35 government hospitals that had mortuaries were headed by either medical attendant (48.6%) mortuary attendant (37.1%) or nurses (2.9%) who reported to either laboratory manager (88.6%), matron (2.9%) or Hospital management (2.9%) (**table 1** refers).

1.1.2 HUMAN RESOURCE

Human resource is the biggest challenge in the provision of quality mortuary services. This is explained by the fact that, almost all mortuaries have medical attendants referred to as mortuary attendants, since they provide mortuary services, but they have no any formal training background. In addition, only Zonal and National Level health facilities have pathologists providing mortuary services, the rest of health facilities do not have either pathologists or trained mortuary practitioners to offer professional mortuary services. Furthermore,

there is no any medical school or college that offer training for morticians or prosectors who could assist pathologists, or medical examiner, in managing the mortuary and performing post-mortem medical examination. A situation analysis involving 52 health facilities (private 15 and government 37) indicated that, of the 12 private health facilities and 35 government health facilities having mortuaries 9 (75%) of private mortuary staff were mortuary attendants while 30 (85.7%) were either mortuary attendants (48.6%) or medical attendants (37.1%) (**table 1** refers).

1.1.3 MORTUARY FUNCTIONS

The main functions of the mortuary are: a) Storage of dead body, b) Preservation of the dead body, c) Post-mortem examination, d) Death certification, e) mortuary information management system (Documentation and records) and f) epidemiological data, policy and planning and g) forensic research. Surprisingly, save for Zonal and National Health Facility Levels, most of the mortuaries at regional and district level are limited to: a) Storage of dead body, b) Preservation of the dead body, c) Post-mortem examination; and d) Death certification; while at the lower government health facility level and most of the private health facility level are limited to storage and death certification. Of the 52 health facilities involved in the situation analysis, 47 (90.4%) had mortuary facilities, 45 (86.5%) had storage facility for dead bodies, 37 (71.2%) had areas for body preparations and 26 (55.3%) facilities having mortuary services had either complete (27.7%) or incomplete (27.7%) post-mortem kits, suggesting that they provided post-mortem examination services. Interestingly only 3 (25%) of the private mortuaries had post-mortem kits whereas 23 (65.7%) of the government mortuaries had post-mortem kits suggesting that post-mortem examinations are usually done at the government mortuaries and hardly at the private mortuaries (**table 1** refers).

1.1.4 INFRASTRUCTURE

The standard requirements for mortuary infrastructure are: a building with at least four rooms for: i) office, ii) storage (dead body & supplies), iii) body preparation, and iv) mortuary data (documents and records). In addition, there should be separate washrooms for staff and visitors, as well as a waiting room and or viewing room. There should also be means of communication e.g. telephone and electronic data system; power supply with standby generator; and running tap water. On the contrary, most of the private health facilities have only a single room for storage of dead bodies. Other infrastructure requirements are either missing or shared within the hospital facility. However,

the current status of mortuaries in the country requires an urgent renovations or new constructions as most infrastructures were inherited from the colonial era. These guidelines are designed by the MoHCDGEC to improve these essential human health services.

1.1.5 MORTUARY FINANCING

Financing of the mortuary services is supposed to be under the Department of Curative Services through the Health Laboratory Services Sub-section. However, the health laboratory services subsection has many sub-sub-sections including: i) clinical laboratories, ii) public health laboratories, and iii) National blood transfusion services. Given the budget constraints, mortuary services in most cases fail to compete with other health laboratory sub-subsections, and therefore mortuaries receive very little budget or do not receive any budget. Health laboratory services also receive financial support from Development Partners either directly or through Implementing Partners, however, these financial supports do not include mortuary services, yet mortuary services are part of the laboratory services.

TABLE 1: Summary of Situation Analysis for Mortuary Services

Items	Public Health facilities		Private Health facilities		All Health facilities	
	n	**%**	**n**	**%**	**n**	**%**
Number of Health facilities	**15**	**28.8%**	**37**	**71.2%**	**52**	**100%**
	15	**100.0%**	**37**	**100.0%**	**52**	**100.0%**
Mortuary availability	12	80.0%	35	94.6%	47	90.4%
Body storage area	10	66.7%	35	94.6%	45	86.5%
Body Preparation	7	46.7%	30	81.1%	37	71.2%
Head of Mortuary	**12**	**100.0%**	**35**	**100.0%**	**47**	**100.0%**
Pathologist	1	8.3%	2	5.7%	3	6.4%
Laboratory Scientist	0	0.0%	1	2.9%	1	2.1%
Laboratory Assistant	0	0.0%	1	2.9%	1	2.1%
Mortuary Attendant	9	75.0%	13	37.1%	22	46.8%
Medical Attendant	2	16.7%	17	48.6%	19	40.4%
Nurse	0	0.0%	1	2.9%	1	2.1%
Mortuary management	**12**	**100.0%**	**35**	**100.0%**	**47**	**100.0%**
Laboratory	4	33.3%	31	88.6%	35	74.5%
Head of Laboratory services	1	8.3%	1	2.9%	2	4.3%
Matron	3	25.0%	1	2.9%	4	8.5%
Health Secretary	1	8.3%	0	0.0%	1	2.1%
Director of Nursing Services	0	0.0%	1	2.9%	1	2.1%
Hospital Management	0	0.0%	1	2.9%	1	2.1%
Nurse in-charge	1	8.3%	0	0.0%	1	2.1%
Medical Officer In-charge	2	16.7%	0	0.0%	2	4.3%

Post mortem kit	**12**	**100.0%**	**35**	**100.0%**	**47**	**100.0%**
Complete set	1	8.3%	12	34.3%	13	27.7%
Incomplete set	2	16.7%	11	31.4%	13	27.7%
No kit	9	75.0%	12	34.3%	21	44.7%

Source: MoHCDGEC 2020

1.2 SCOPE

The scope of this Guideline covers a hospital mortuary, a standalone mortuary, and funeral home both in public and private sectors. The Guideline also covers funeral services limited to mortuary supplies and transportation.

1.3 DESCRIPTION OF MORTUARY

A mortuary is a facility or building, or a room in a hospital or a facility outside the hospital either public or private, where a dead body is kept before being released for burial or cremation and sometimes for investigation to determine the cause of death, as in post-mortem examination, in a facility where anatomical or Forensic Pathologist, or a medical examiner is available.

The needs of hospital staff, attendants, relative of the deceased and other authorised persons must be considered in the design, layout and functionality of the unit to provide a safe and private environment.

The design must address the following:

a) Number of bodies to be stored;
b) Method of storage i.e. refrigerated cabinets, cold room, freezing capacity;
c) Separation of entries for families to view/identify body;
d) Delivery of body from inside the hospital or external delivery (whichever is applicable);
e) Postmortem examination services (if applicable);
f) Water and power supply;
g) Mortuary waste management and disposal.

1.4 MORTUARY SERVICES ON MAINLAND TANZANIA

In a recently conducted desk review of the current management structures and reporting levels for mortuaries in Mainland Tanzania,

According to Tanzania Population Estimator by January 10th 2020 the population of Tanzania was estimated at **58,919,572** with estimated death of 1,011 per day[1],[2].

By January 2020, there were 510 mortuary types in the United Republic of Tanzania (Mainland and Zanzibar) at different levels of its health care delivery system: Health Centre 238 (46.7%), Faith Based 90 (17.6%), District 89 (17.5%), Private 32 (6.3%), Regional Referral Hospital 25 (4.9%), Stand-Alone 15 (2.9%), Military 10 (2.0%), Zonal 4 (0.8%), Specialised Hospital 4 (0.8%), National 3 (0.6%), Nursing Home 0 (0.0%) and Funeral Home 0 (0.0%) **Chart 2** refers. Furthermore, in the same period, there were 502 mortuary types on Mainland Tanzania at different levels of its health care delivery system: Health Centre 238 (47.4%), Faith Based 90 (17.9%), District 85 (16.9%), Private 32 (6.4%), Regional Referral Hospital 24 (4.8%), Stand-Alone 15 (3.0%), Military 9 (1.8%), Zonal 4 (0.8%), Specialised Hospital 3 (0.6%) and National 2 (0.4%). There were no Nursing or Funeral Homes with mortuaries **Chart 3** refers.

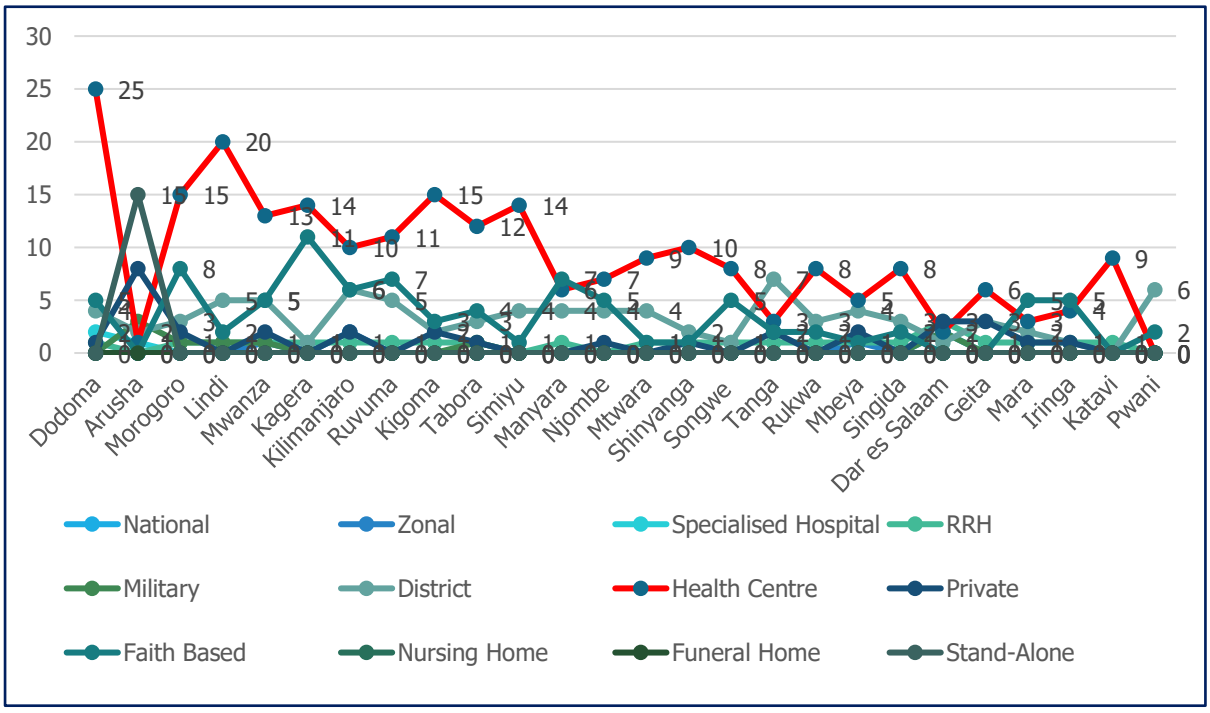


CHART 1: Mortuary types and ownership by regions, Mainland Tanzania

Source: MOHCDGEC 2020

[1] http://worldpopulationreview.com/countries/tanzania-population/
[2] World Population Prospects (2019 Revision)

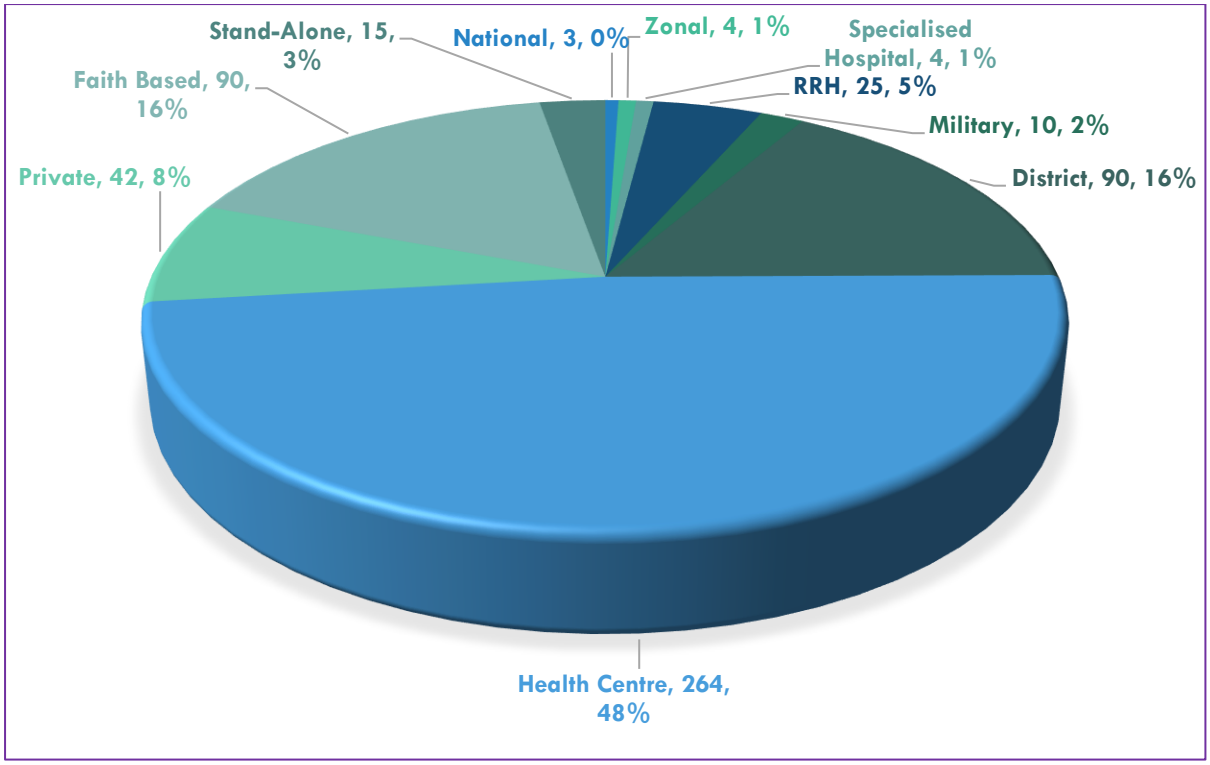


CHART 2: Mortuary types and ownership, Mainland Tanzania and Zanzibar

Source: MoHCDGEC 2020

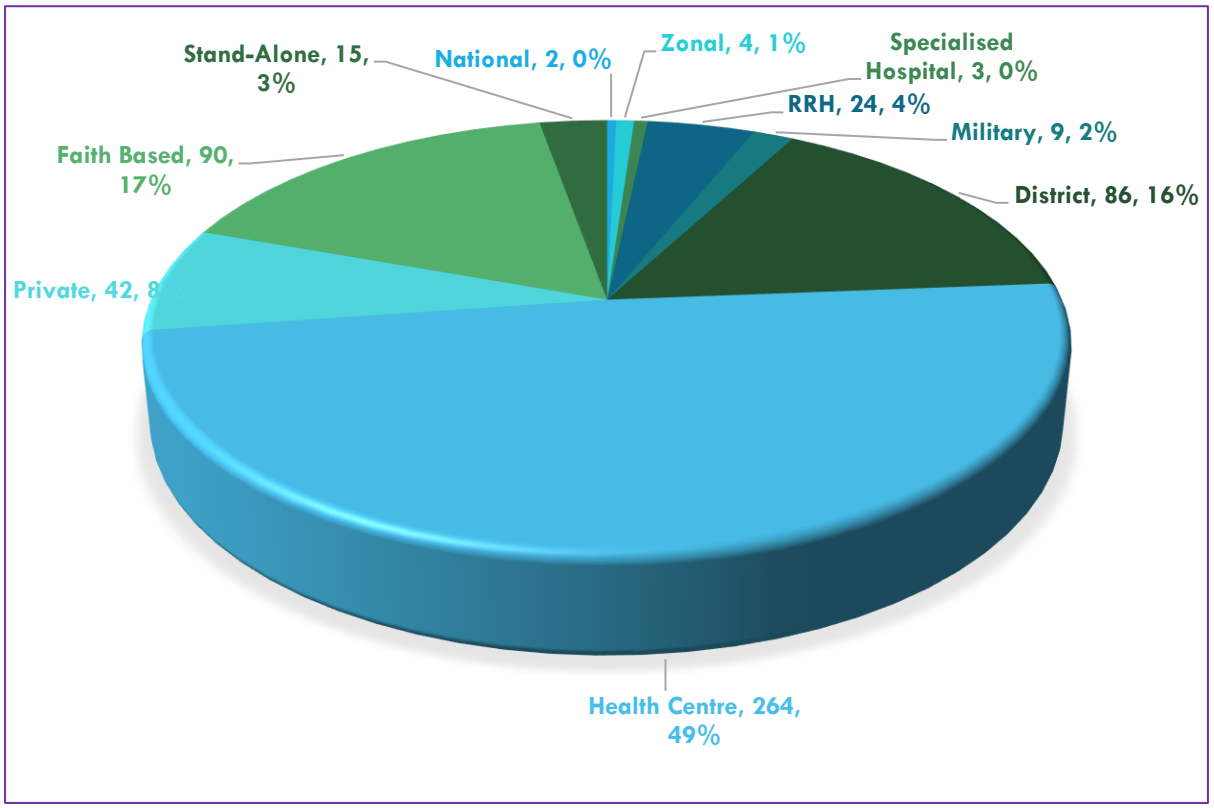


CHART 3: Mortuary types and ownership, Mainland Tanzania

Source: MoHCDGEC 2020

According to Tanzania population estimates for 2016/2019 (NBS), Dar es Salaam region had an estimated population of 5,781,557 meaning each mortuary served a population of 444,735, Mara region with an estimated population of 1,972,173, each mortuary served a population of 40,248, while Pwani region with an estimated population of 1,224,120, each mortuary served a population of 153,015.

1.4.1 MORTUARY TYPES IN TANZANIA

By January 2020, there were 510 mortuary types in the United Republic of Tanzania at different levels of its health care delivery system: Health Centre 238 (46.7%), Faith Based 90 (17.6%), District 89 (17.5%), Private 32 (6.3%), Regional Referral Hospital 25 (4.9%), Stand-Alone 15 (2.9%), Military 10 (2.0%), Zonal 4 (0.8%), Specialised Hospital 4 (0.8%), National 3 (0.6%), Nursing Home 0 (0.0%) and Funeral Home 0 (0.0%). Furthermore, in the same period, there were 502 mortuary types on Mainland Tanzania at different levels of its health care delivery system: Health Centre 238 (47.4%), Faith Based 90 (17.9%), District 85 (16.9%), Private 32 (6.4%), Regional Referral Hospital 24 (4.8%), Stand-Alone 15 (3.0%), Military 9 (1.8%), Zonal 4 (0.8%), Specialised Hospital 3 (0.6%), National 2 (0.4%), Nursing Home 0 (0.0%) and Funeral Home 0 (0.0%)

1.4.1.1 Ranking Mortuaries by Regions

In ranking the number of mortuaries by regions, Dodoma ranked 1st with 38 (7.6%), Arusha and Morogoro ranked 2nd with 30 (6.0%), Lindi ranked 3rd with 29 (5.8%), Mwanza ranked 4th with 28 (5.6%), Kagera and Kilimanjaro ranked 5th with 27 (5.4%), Ruvuma ranked 6th with 24 (4.8%), Kigoma ranked 7th with 23 (4.6%), Tabora ranked 8th with 22 (4.4%), Simiyu ranked 9th with 19 (3.8%), Manyara ranked 10th with 18 (3.6%), Njombe ranked 11th with 17 (3.4%), Mtwara, Shinyanga, Songwe and Tanga ranked 12th with 15 (3.0%), Mbeya, Rukwa and Singida ranked 13th with 14 (2.8%), Dar es Salaam and Geita ranked 14th with 13 (2.6%), Iringa and Mara ranked 15th with 12 (2.4%), Katavi ranked 16th with 10 (2.0%) and Pwani was the 17th and ranked least with 8 (1.6%).

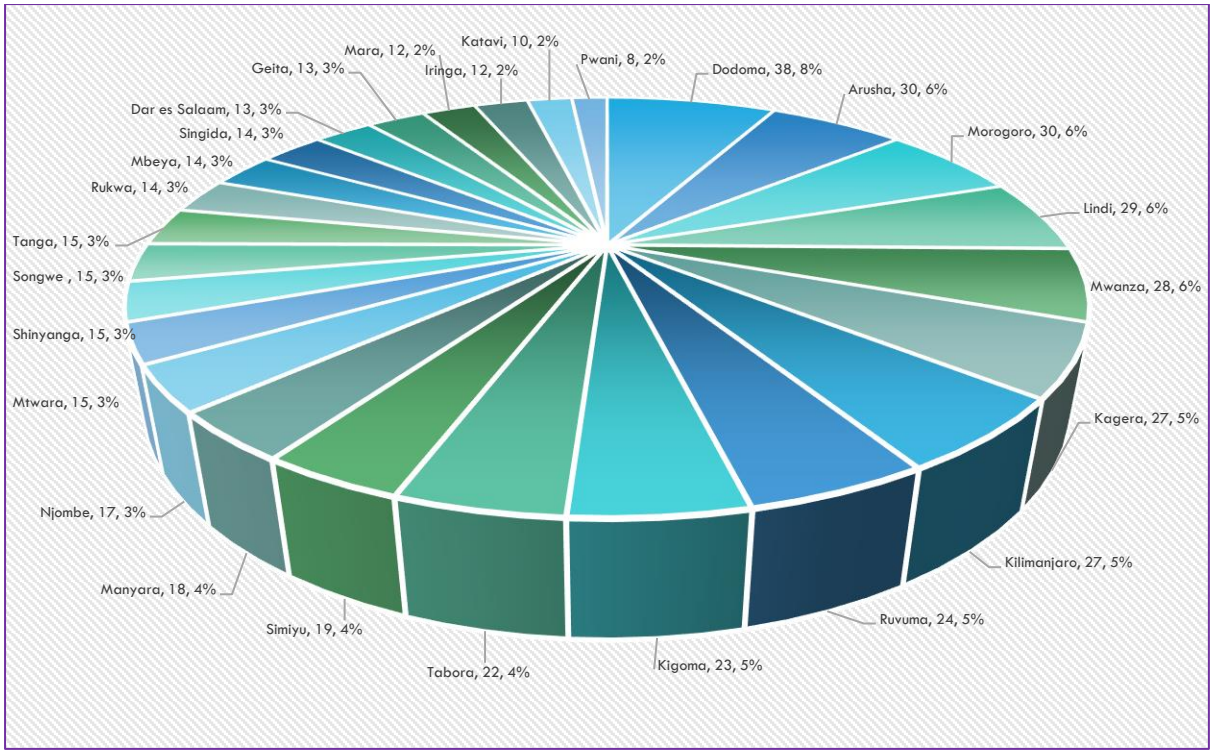


CHART 4: Ranking of mortuaries by regions

Source: MoHCDGEC 2020

1.4.1.2 Ranking Health Centre Mortuaries by Regions

Health centres at the primary level of health care delivery system had the largest number of mortuaries at 238 (47.4%) when compared to other levels. When compared by regions, Dodoma ranked 1st with 25 (5.0%), Lindi ranked 2nd with 20 (4.0%), Morogoro and Kigoma ranked 3rd with 15 (3.0%), Kagera and Simiyu ranked 4th with 14 (2.8%), Mwanza ranked 5th 13 (2.6%), Tabora ranked 6th with 12 (2.4%), Ruvuma ranked 7th with 11 (2.2%), Kilimanjaro and Shinyanga ranked 8th with 10 (2.0%), Mtwara and Katavi ranked 9th with 9 (1.8%), Rukwa, Singida and Songwe ranked 10th with 8 (1.6%), Njombe ranked 11th with 7 (1.4%), Geita and Manyara ranked 12th with 6 (1.2%), Mbeya ranked 13th with 5 (1.0%), Iringa ranked 14th with 4 (0.8%), Mara and Tanga ranked 15th with 3 (0.6%), Dar es Salaam – the Commercial City ranked 16th with 2 (0.4%) and Arusha ranked 18th and also least with 1 (0.2%). Pwani does not have mortuary at health centre level.

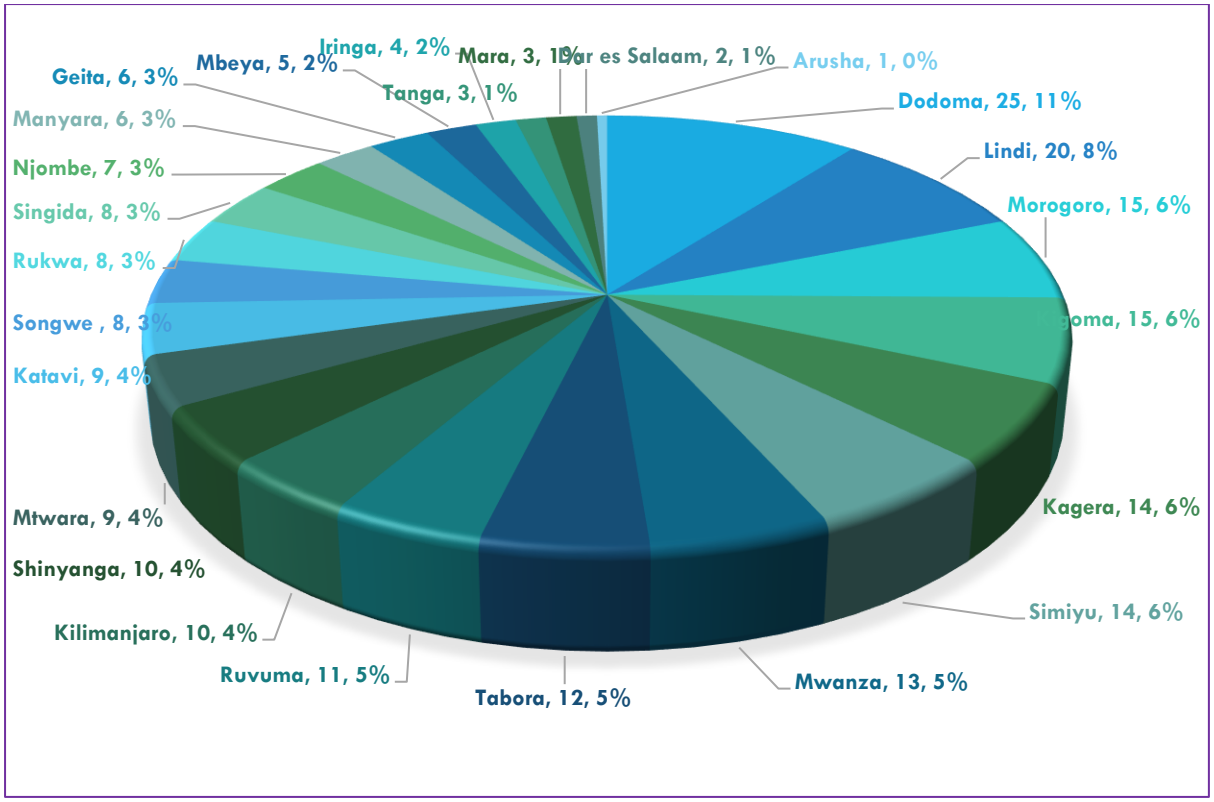


CHART 5: Ranking of health centre mortuaries by regions

Source: MOHCDGEC 2020

CHAPTER TWO

2. PLANNING

In planning and designing the Mortuary facility, the following must be considered: operational model, model of care (Body Holding), planning model, Functional areas; and functional relationship.

2.1 OPERATIONAL MODEL

Operational model should include: Hours of operation and personnel

2.1.1 HOURS OF OPERATION

Working hours will be on a routine eight hours per day, seven days per week. Work times should be 0730 HR – 1530 HR. The mortuary unit will also be accessible to authorised personnel 24 hours per day, 7 days per week.

2.1.2 PERSONNEL

The mortuary should have adequate number of trained and qualified personnel according to the manning level specified in the national mortuary services guideline and the National Standard for Medical Laboratories (2017). Therefore, mortuaries should have adequate number of trained and qualified personnel according to the level of mortuary services as follows:

2.1.2.1 Level I Mortuary

No	Staffing	Qty
a)	Mortuary attendants (full time)	2
b)	Pathologists/registered laboratory practitioners (part time)	1

2.1.2.2 Level II Mortuary

No	Staffing	Qty
a)	Mortuary attendants (full time)	2
b)	Mortician (full time)	1
c)	Prosector (full time)	1

d)	Pathologists/registered laboratory practitioners (part time)	1

2.1.2.3 Level III Mortuary

No	Staffing	Qty
a)	Mortuary attendants (full time)	3
b)	Mortician (full time)	2
c)	Prosector (full time)	2
d)	Pathologists/registered laboratory practitioners (full time)	1
e)	Forensic pathologist (part time)	1

2.1.2.4 Funeral home

No	Staffing	Qty
a)	Funeral home attendants (full time)	1
b)	Pathologists/registered laboratory practitioners (part time)	1

2.1.3 MORTUARY FUNCTIONS ACCORDING TO LEVEL OF MORTUARY SERVICES

The main functions of the mortuary are: a) Storage of dead body, b) Preservation of the dead body, c) Post-mortem examination, d) Death certification, e) mortuary information management system (Documentation and records) and f) epidemiological data, policy and planning and g) forensic research. However, not all functions are performed at each level of Mortuary services. Below is a summary of mortuary functions according to the level of mortuary services

TABLE 2: Summary of mortuary functions and capacity for each level

No	Functions	Level I	Level II	Level III
1	Storage of dead body	Yes	Yes	Yes
2	Preservation of dead body	Optional	Yes	Yes
3	Autopsy examination	No	Yes	Yes
4	Death certification	No	Yes	Yes
5	Mortuary information system	Yes	Yes	Yes
6	Epidemiological data & planning	Yes	Yes	Yes
7	Forensic research	No	Optional	Yes
8	Storage capacity (number of bodies)	6-12	12-24	>24
9	Storage method	Refrigerated cabinet	Refrigerated cabinet	Refrigerated cabinet/walk in cold room

2.2 MODEL OF CARE – BODY HOLDING

Model of care should focus on body holding rooms/area, as well as the storage area. In addition, it should consider the following:

a) options for body storage;
b) consideration for safety and security of the body;
c) types of mortuary cold chambers.

2.2.1 TYPES OF MORTUARIES

2.2.1.1 Bank of refrigerated cabinets

Body-cabinet selection and installation requires the following considerations:

a) Three-level body cabinets could be selected which have a single door to give access to all of the body trays, for instances where separation between bodies is required. Alternatively, cabinets that provide a single door for access to all the body trays are acceptable;
b) It is critical that bariatric (obese) bodies are catered for in each cabinet. The lowest-level tray should be designed for this purpose;
c) Special consideration is to be given to the provision of capacity for storage of juvenile and infant decedents. The handling of these bodies is an especially sensitive and emotive issue, and separate storage in dedicated cabinets is recommended;
d) Body lifts must be supplied to facilitate the loading of bodies into and removal of bodies from the cabinets. Body lifts help to preserve dignity

when handling bodies, while at the same time making it easier and safer for mortuary personnel to handle bodies;

e) A clear space must be provided in front of the body cabinets to allow for the placing of a corpse into the cabinets. It is recommended that there be at least a 3m clearance between the front of the cabinet and any fixed structure. This is to accommodate whatever means of conveyance is used to transport a corpse to the storage area and then load it into the cabinet.

2.2.1.2 Walk-in cold room for individual trolleys

The required cabinet size is fundamental when designing a mortuary. Where space is not too limited and there are no indications that there may be, cultural concerns relating to the storage of bodies together in a cold room, it is recommended that cold rooms be used. Cold rooms offer space savings when compared to cabinets.

2.2.2 CONSIDERATIONS FOR MORTUARY

a) Security of body;
b) Safety of the body
c) Security of documents and records (mortuary information)
d) Isolation and post-mortem needs; and
e) Expected length of time for retention of body;

2.2.3 TYPES OF MORTUARY COLD CHAMBERS

a) Positive temperature +2°C to +4°C (the most common type);
b) Negative temperature -15°C to -25°C (used by forensic institutes for the storage of body that have not yet been identified).

2.3 PLANNING MODELS

a) The mortuary facility shall have an identified address and shall not be in residential building, hotel, bar or any other commercial or entertainment premises;
b) For mortuaries located in a hospital building used for other medical services, It must be located at ground level to allow easy and discrete access to deliver and/or remove body via an exit lobby;
c) For the standalone mortuary, the building should be away from any public area, recreation, business area and easily accessible throughout the year;

d) The premises shall have good and proper functioning toilet, shower or bathroom, sluicing room or washing slab; according to the national mortuary guidelines;
e) The premises shall have reliable clean running water, adequate ventilation, lightning system, incinerators and burial area for sharps after sterilization; according to the national mortuary guidelines;
f) There shall be an effective communication system between the mortuary and other healthcare facility;
g) For mortuaries receiving dead bodies from health facilities, shall have a memorandum of understanding between the mortuary and the facilities bringing in dead bodies;
h) Each mortuary facility shall keep records of all the dead bodies stored, specimen taken for investigation and all procedures performed. Such records shall be kept for at least five years before disposing off in an appropriate manner and shall be accessible for inspection by appropriate officers;
i) The mortuary shall operate in accordance with the guidelines issued from time to time by the MoHCDGEC;
j) The mortuary shall have an appropriate standard equipment and other supplies according to the level of the mortuary, before offering mortuary services;
k) Any person who owns a mortuary shall ensure that equipment at the facility are regularly maintained and operational; and services manual/guidelines shall be available;
l) The costs mechanism of mortuary services provided shall be made available to the clients.

2.4 FUNCTIONAL AREAS

The Mortuary Unit will consist of the following functional areas depending on the size of the facility and the operational policy:

a) Entry Lobby;
b) Administration area;
c) Body Holding Area;
d) Waiting area;
e) Viewing Area:
f) Wash room for visitors and relatives/bereaved
g) Storage area;
h) Staff area (rest room, changing room, wash room);

i) Postmortem examination area (for mortuaries performing autopsy).
j) documents and records area (mortuary information management system)
k) Exit lobby.

2.4.1 ENTRY LOBBY/ADMINISTRATION/EXIT LOBBY

The Entry and Exit Lobbies form part of a single space with direct access to the body holding area. The area must include:

a) Hand basin;
b) Workstation for body registration and removal details;
c) Parking space for the transport trolley;
d) Parking space for a hoist / elevating trolley.

2.4.2 BODY HOLDING AREA

The Body Holding Area provides refrigerated space for the temporary storage of body. The area must allow for the following:

a) Separate spaces / cabinets must be allowed for isolation;
b) Maneuvering space in front of refrigerated cabinets to insert/withdraw the trays;
c) 3 square meters is required for a body on a loose tray or trolley in a cold room.

2.4.3 WAITING AND VIEWING AREA

The area must allow for the following:

a) Discrete entrance away from the main hospital to the Waiting Area for relatives, police and others;
b) Direct visibility into the adjoining Viewing Area.

2.4.4 STORAGE AREA

The area must allow for the following dedicated areas:

a) Lockable storage area for the deceased's personal effects;
b) Clean linen area;
c) Cleaning materials and agents;
d) Used linen collection area;
e) Plastic body bags and sealing machine area.

2.4.5 STAFF AREA

The area must allow for the following:

a) Staff areas comprising of office, workstations, male and female changing rooms, Hand washing/sanitization and amenities;
b) Office for use by the Mortuary manager, pathologist and police meeting / teaching rooms (if applicable).

2.5 FUNCTIONAL RELATIONSHIPS

Functional relationship of the mortuary to other administrative and clinical area is of paramount importance, for the efficiency, safety and security of mortuary services. Functional relationship should therefore consider both external and internal factors.

2.5.1 EXTERNAL

Mortuary must be accessible through an exterior entrance and must be located to avoid the need for transporting body through public areas.

In hospital setting the mortuary must also be located in close proximity to a laboratory and relevant clinical areas for transportation of dead body and supplies to the mortuary and transportation of samples to the laboratory.

2.5.2 INTERNAL

The Waiting Area and Viewing Area must be collocated. However, there must be no access to other sections of the mortuary for viewers. Entry Lobby, Exit Lobby and Administrative Area (Receipt, Support, Viewing and Waiting areas) form part of a single area.

CHAPTER THREE

3. DESIGN OF MORTUARY

The mortuary design must consider:

a) accessibility;
b) infection prevention and control;
c) environmental considerations;
d) space standards and components;
e) safety and security, finishing;
f) fixtures and fittings as well as path of work flow.

3.1 REQUIREMENTS FOR EACH LEVEL OF MORTUARY SERVICES

Levels of the mortuary are according to the primary, secondary and tertiary levels of health services. They are also categorized according to the levels of the laboratory services as follows:

a) **Level I mortuary services:** mortuaries operating at equivalent level of dispensary and health centre; and can operate as attached mortuary or standalone mortuary;
b) **Level II mortuary services:** mortuaries operating at equivalent level of district and regional hospital; and can operate as attached mortuary or standalone mortuary;
c) **Level III mortuary services:** mortuaries operating at the equivalent level of zonal or national hospital; and can operate as attached mortuary or standalone mortuary.

The MoHCDGEC, Planning Unit has developed approved minimum mortuary floor plans for level I and II (**Figures 1 & 2 and Tables 3 & 4** refers).

Level I mortuary services floor design

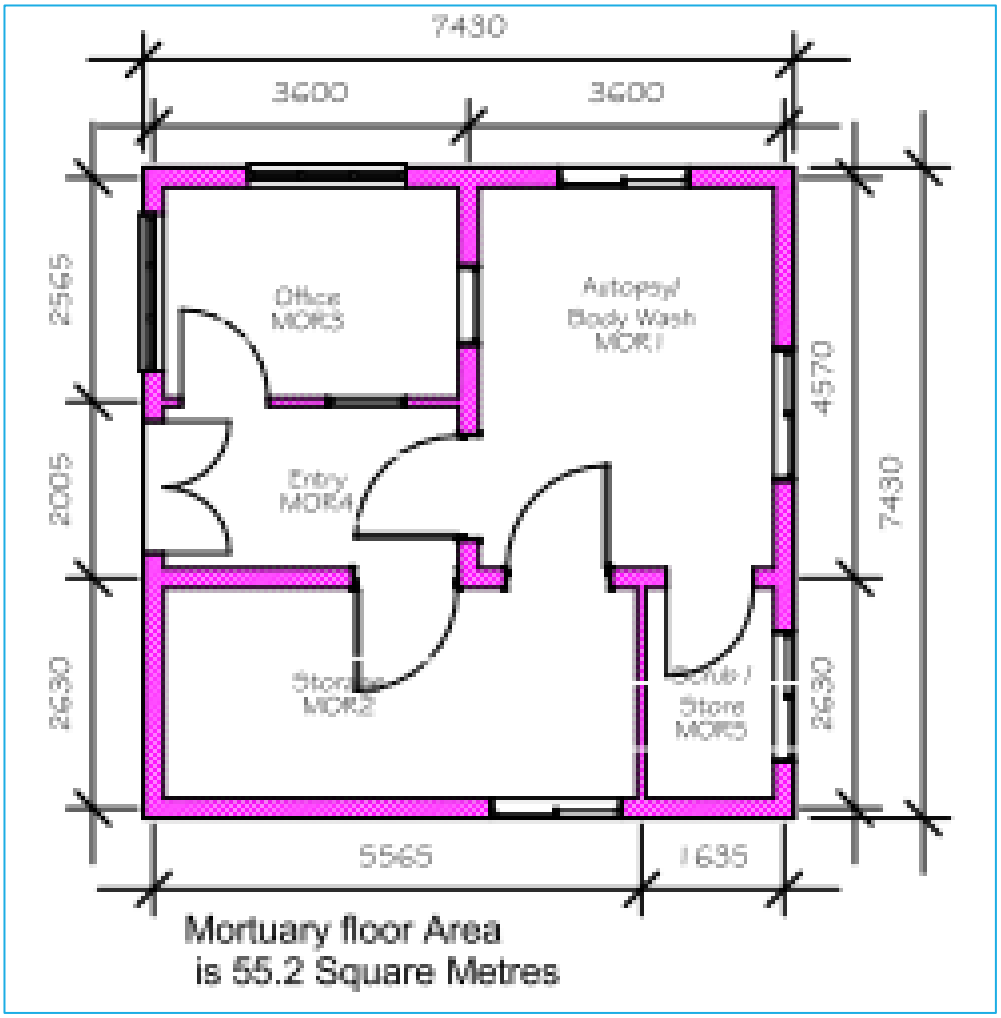


FIGURE 1: Approved minimum floor plan for level I mortuary

Source: MOHCDGEC: National Standards for Medical Laboratories 2017

TABLE 3: Minimum requirements for level I mortuary premise

No	Description	Qty
1.	Reception, Documents & Records	1
2.	Office for Mortuary in-charge & Quality Officer	1
3.	Office for Safety Officer & Data Officer	1
4.	Office for Pathologist/registered Laboratory Practitioner	1
5.	Office for staff (at least 2 persons)	2 persons
6.	Tea/lecture room (at least 6 people)	6 persons
7.	Changing room Pathologists/Laboratory Practitioner)	2

8.	Changing room staff (M/F)	2
9.	Toilet for staff (M/F)	2
10.	Toilet for clients/visitors (M/F)	2
11.	cold room/refrigerated cabinets for >6 bodies	At least 6 bodies
12.	Body preparation area	At least 1 table
13.	Sluice area	1
14.	Store (equipment, chemicals and supplies)	At least 10m^2
15.	Body viewing area	At least 12m^2
16.	Waiting area (clients/visitors)	At least 15m^2

Source: Modified form MOHCDGEC: National Standards for Medical Laboratories 2017

Level II mortuary services

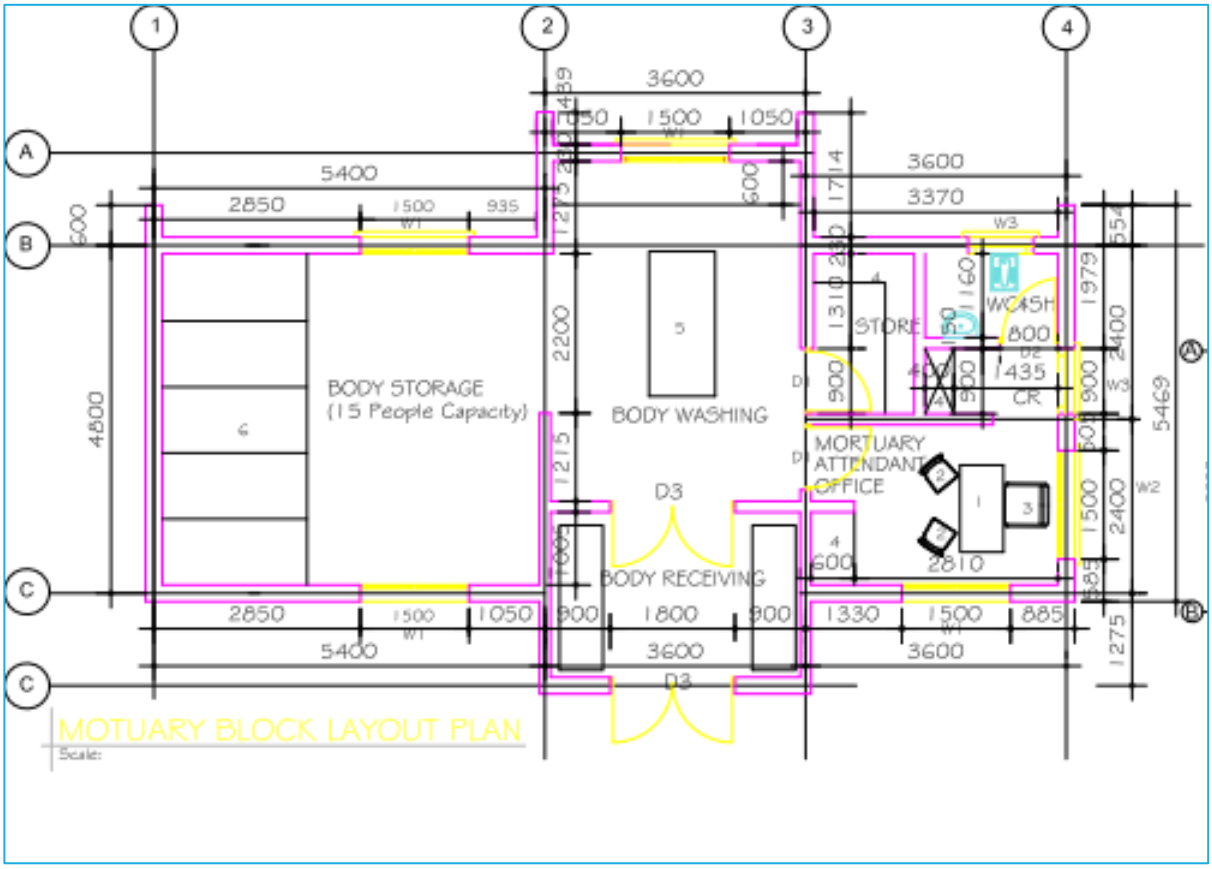


FIGURE 2: Approved minimum floor plan for level II mortuary

Source: MOHCDGEC: National Standards for Medical Laboratories 2017

TABLE 4: Minimum requirements for level II mortuary premise

No	Description	Qty
1.	Reception, Documents & Records	1
2.	Office for Mortuary in-charge & Quality Officer	1
3.	Office for Safety Officer & Data Officer	1
4.	Office for Pathologist/medical examiner	1
5.	Office for staff (at least 4 persons)	4 persons
6.	Tea/lecture room (at least 12 people)	12 persons
7.	Changing room Pathologists/Medical Examiner (M/F)	2
8.	Changing room staff (M/F)	2
9.	Toilet for staff (M/F)	2
10.	Toilet for clients/visitors (M/F)	2
11.	cold room/refrigerated cabinets for >12 bodies	At least 12 bodies
12.	Autopsy/Post-mortem area	At least 1 table
13.	Body preparation area	At least 1 table
14.	Sluice area	1
15.	Store (equipment, chemicals and supplies)	At least 12m^2
16.	Body viewing area	At least 15m^2
17.	Waiting area (clients/visitors)	At least 30m^2

Source: Modified from MOHCDGEC: National Standards for Medical Laboratories 2017

Level III mortuary services

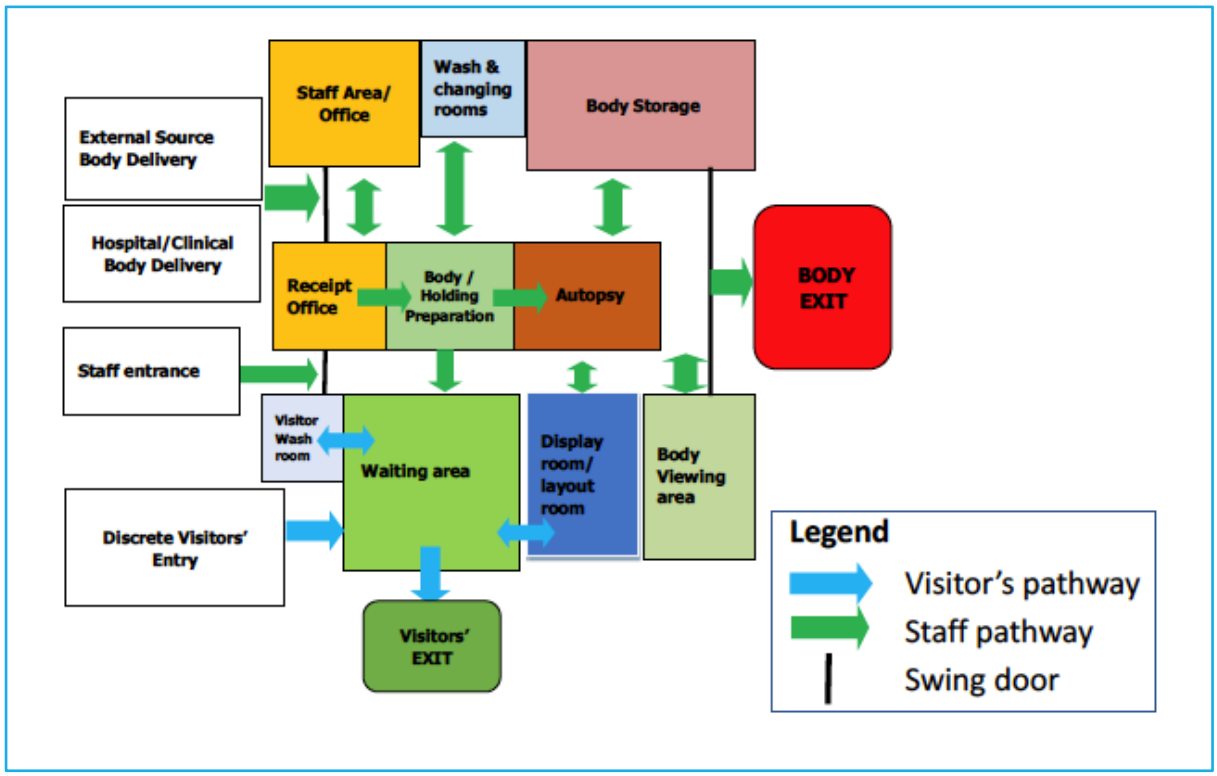


FIGURE 3: Recommended mortuary functional relationships and adjacency design

Source: Modified from Australasian Health Facility Guidelines: Part B- Health Facility Briefing and Planning; 490 - Hospital Mortuary/Autopsy Unit. Revision 5.0: 25 May, 2015.

TABLE 5: Minimum requirements for level III mortuary premise

No	Description	Qty
1	Reception	1
2	Mortuary Documents & Records	1
3	Office for Mortuary Manager	1
4	Office for Quality Officer	1
5	Office for Safety Officer	1
6	Office for Data Officer	1
7	Office for Pathologist	1
8	Office for staff (at least 6 persons)	6 persons
9	Tea/lecture room (at least 18 persons)	18 persons
10	Changing room Pathologists (M/F)	2

11	Changing room staff (M/F)	4 (2 persons each room)
12	Toilet for staff (M/F)	2
13	Toilet for clients/visitors (M/F)	2
14	Cold room/refrigerated cabinets for >24 bodies	At least 24 bodies
15	Autopsy/Post-mortem area	At least 2 tables
16	Body preparation area	At least 2 tables
17	Sluice area	1
18	Store (equipment, chemicals and supplies)	At least 15m^2
19	Body viewing area	At least 20m^2
20	Waiting area (clients/visitors)	At least 50m^2

Source: Revised from MOHCDGEC: National Standards for Medical Laboratories 2017

3.1 ACCESSIBILITY

Accessibility to the mortuary is one of the most important factor in designing the mortuary facility and establishing the mortuary services. Both external and internal factors should be considered.

a) The position of the mortuary in a hospital should be such that the mortuary is easily accessible to mortuary staff and related service providers without presenting either aesthetic, emotional or ethical problems for unrelated hospital staff, patients or visitors. Visitors to the mortuary, however, should be provided with clear and direct access to the mortuary upon arrival at the hospital, without having to travel unnecessarily through hospital departments;
b) Where bodies are moved into or out of the mortuary, they should not be moved through general public-access areas. Appropriate routes would include technical service or goods corridors and through the hospital's support services yard;
c) Special considerations should be given to plans for contingency access to the mortuary in the event of case-load surges, which may result from disasters;
d) Bodies should not be held for any period in any locations between the body-holding rooms within clinical areas and the mortuary;
e) Where a mortuary unit is used jointly between the hospital and the local authority it is beneficial for the mortuary to be in a building separate from the main hospital building;
f) The delivery of bodies to the mortuary and their subsequent removal from the facility is to be such that it is carried out in a manner that is not visible to the general public, preferably in a covered and enclosed area.

g) While siting and access are important aspects when locating a mortuary, it is also important to provide the mortuary with pleasant surroundings in order to promote the dignity of those working in or visiting the mortuary.

3.1.1 EXTERNAL

Mortuary Unit is to have separate access as follows:

a) Direct access from the hospital for delivery of the body;
b) Direct but separate and discreet access for relatives of the deceased from all relevant areas of the hospital to Mortuary waiting / viewing area;
c) Adequate access for funeral service providers, for vehicle parking and discrete weather protection;
d) Facilities for the collection of body;
e) Adequate access for ambulances, police or other vehicles (coroner, police or private) delivering and/or collecting body;

3.1.2 INTERNAL

The body holding room is to have direct access to/from:

a) Hospital corridor for use by staff;
b) Viewing Room;
c) Discreet access from body holding/cold room to a hearse (dead body carrying vehicle) and/or ambulance parking bays.

3.2 INFECTION PREVENTION AND CONTROL

Body stored in the mortuary may contain infectious disease, therefore safety precautions must always be taken while handling such body.

Non–disposable used instruments and materials must be cleaned and re-circulated under normal procedures through the facility Sterile Supply Unit or autoclaved within the mortuary unit. The unit must be designed to control infection utilizing the following:

a) Layout shall be designed to minimize cross contamination in work areas;
b) Provision of a small wash-down/disposal/booting area;
c) Provision of an adequate number of hand wash facilities;
d) Provision of appropriate cleaning, waste storage and waste disposal;

e) Use of suitable materials, finishing and personnel protective equipment (PPE) such as apron, boots, gloves and goggles. Facemasks, head cover and mortuary gowns;
f) Sample storage facilities;
g) First aid facilities at relevant post;
h) Identification and isolation of space with adequate ventilation systems for potential infectious hazardous body;
i) Vaccination policy of staff to prevent disease e.g. Hepatitis.

3.3 ENVIRONMENTAL CONSIDERATIONS

The Mortuary unit needs to be designed to provide staff with sufficient space, working surfaces, proper lightning, well ventilation, suitable cooling system, security and appropriate equipment to safely carry out their duties.

3.3.1 INTERIOR DESIGN

The interior design of the Mortuary Unit must include the following as primary items of their design:

a) Infection prevention control;
b) Cooling and ventilation system;
c) Plumbing and drainage system;
d) Electricity and Lighting;
e) Safety and security.

3.3.2 ACOUSTICS

Acoustic design must ensure that conversations in adjoining rooms cannot be overheard by relatives in the viewing area. The rooms must be sound-proof to prevent visitors listening to what is going on in the work areas.

3.4 SPACE STANDARDS AND COMPONENTS

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.

3.4.1 MORTUARY ERGONOMICS DESIGNED FOR HUMAN USE

Mortuary ergonomics refer to improvement process that removes risks factors that lead to musculoskeletal injuries and allows for improved human performance and productivity.

The Mortuary Unit must be ergonomically designed to avoid any potential injury to staff, visitors or maintenance personnel. Example height working benches, correct positioning of electric sockets.

3.4.2 ACCESS AND MOBILITY

The layout must comply with the requirements for a person with disability in accordance with the Disabilities Act Accessibility Guidelines for Building Facilities (Act No. 2 and 2010).

3.5 SAFETY AND SECURITY

The Mortuary Unit design must consider the safety use of the building infrastructure so as to ensure safety and security of the users.

3.5.1 SAFETY

The interior design of the Mortuary Unit must consider the impact of finishing, surfaces and fittings on safety including the following:

a) Floor covering selection;
b) Adequate drainage;
c) Protection from protrusions or sharp edges;
d) Stability and height of equipment or fittings;
e) Adequate protection against infection and any other hazards;
f) Waste management;
g) Firefighting equipment.

3.5.2 SECURITY

For security purpose of the Mortuary Unit, the following aspects must be considered:

a) Deceased bodies must be identified and secured so that only authorized personnel can access to them;
b) Personal valuables left or found on the body must be secured;

c) Samples removed during post-mortem, must follow chain of custody;
d) Staff personal belongings and security, there should be provision for mortuary staff cabinets for keeping safe personnel belongings;
e) There should be controlled movements during and after working hours so as to limit unauthorized access in the mortuary;
f) Documents and records confidentiality related to the deceased should be secured.

3.6 FINISHING

Finishing materials of the Mortuary Unit must be robust, impervious, non-rusting, non-decaying and non-staining, which will not deteriorate under continuous use. They must be designed for easy cleaning and be free from sharp edges or projections to prevent injuries.

3.6.1 CEILING FINISHING

Ceilings must be washable, impermeable and non-porous.

3.6.2 FLOOR FINISHING

a) Floor finishing must be non-slip for all areas especially wet prone areas. It must be impervious and easy to clean;
b) Sharp edges must be curved;
c) The floor must have adequate drainage;
d) Drains must be closed and fitted with appropriately filtered traps for ease of hosing down.

3.6.3 WALL FINISHING

Wall surfaces in the body holding area must be washable and/or scrubbable.

3.7 FIXTURES AND FITTINGS

Fixtures and fittings that will be used for support including grab rails, handrails, shower rails, towel rails, soap holders and footrests should be able to support the weight of a heavy person including the concentrated load of a falling person.

The equipment layout of the mortuary unit must ensure:

a) Adequate provision for operation and maintenance;

b) Provision of services as required;
c) Door sized to allow for delivery and removal of the equipment;
d) Adequate sized swinging doors or auto-sensor opening door to allow entry and exit of the body and mortuary personnel without touching the door;
e) Adequate provision for lifting (weight loads).

3.7.1 SAFETY SHOWER AND EYE WASH STATION

Mortuary unit must have safety shower and eye wash stations.

3.8 BUILDING SERVICES REQUIREMENTS

The layout of mortuary building must comply with the requirements for a person with disability in accordance with the Disabilities Act Accessibility Guidelines for Building Facilities (Act No. 2 and 2010)

3.8.1 AIR-CONDITIONING AND VENTILATION

Mortuary areas require good ventilation. Ventilation of the building must consider the risk of air borne pathogens and orders. The working temperature in the Mortuary Unit must be conducive:

a) The temperature of the body holding area must be maintained within a comfortable range not exceeding 20-21°C;
b) The ventilation system must be isolated from other ventilation systems by being designed to minimize the spread of odors and airborne pathogens. The exhaust air is to be discharge to atmosphere such that it cannot be drawn back into the mortuary, any other ventilation inlet, or any indoor portion of the hospital.

3.8.2 ALARMS

These are signals that will alert the users immediately about an unusual occurrence or event:

a) The operating temperatures of all cooled and freezing facility must be continuously monitored and fitted with alarms which are activated when the temperature exceeds a predetermined level;
b) Smoke detectors should be fitted in the facility when applicable.

3.8.3 LIGHTING

The working environment must have adequate lightning within the building but with private so that activities in the mortuary rooms and post mortem areas is not seen from outside.

For security purposes, there shall be enough light in all mortuary surroundings.

3.8.4 POWER SUPPLY

Mortuary Unit must be provided with a reliable power supply:

a) Power supply outlets should be at a height that is protective from getting wet or provided with protective covers;
b) Provide an emergency back-up system for the power supply to the refrigeration, high priority equipment and illumination.

CHAPTER FOUR

4. COMPONENTS OF THE MORTUARY UNIT

4.1 STANDARD COMPONENTS

Mortuary occupy a special place in the perceptions of the community. Facility and their staff involved in mortuary services have a clear obligation to look after the deceased in accordance with community expectations, customs and norms. Failure to do so is not only unacceptable but will raise valid community concerns about what takes place in mortuary.

To comply with standard, the mortuary unit shall contain Standard Components (refer to National Standard for Medical Laboratories (2017)). This is applicable for both public, private health facility and stand-alone mortuary establishments.

4.1.1 ORGANISATION AND MANAGEMENT

The administrative structure must include a pathologist. If the health facility administering the mortuary lacks a pathologist on its staff, formal arrangements must be in place for a pathologist experienced in mortuary practice to be available;

4.1.2 BUILDING DESIGN

4.1.2.1 Power and Lighting

Power supply outlets in post-mortem suites and the body storage facility must be protected from wetting by having protective covers. Shadow-free lighting should be provided for the post-mortem table and dissection benches;

4.1.2.2 Air-Conditioning, Heating and Ventilation

The ventilation system for the post-mortem suite must minimise 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;

4.1.2.3 Flooring

All areas must have non-slip flooring. Wet floor surfaces must be impervious, easy to clean, sealed with coving at the edges and have adequate drainage. Floors must have drains with appropriately filtered traps;

4.1.2.4 Security and Access

The mortuary must have a security system which prevents access by unauthorised persons. The mortuary design should enable procedures to be observed without placing the observers at risk and without contaminating the post-mortem. In cases where there is a high risk, the number of people present at the post-mortem should be minimized;

4.1.2.5 Body Storage

a) A body storage facility must be maintained at a temperature between 2 to 6^{o}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;
b) If long-term storage is required, the body should be maintained atapproximately-20^{o}C;
c) The operating temperatures of all body storage and freezing facilities must be monitored;
d) The body storage facility should have adequate space for the accommodation of each body;
e) 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.

4.1.2.6 Body Viewing Area

a) The body viewing area must have separate public access which does not go through the post-mortem suite. The body viewing area should be separate from the post-mortem theatre to avoid the possibility of visitors seeing or hearing an post-mortem in progress;
b) 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.

4.1.2.7 Post-Mortem Room

The main post-mortem room must use only appropriate tables or trolleys. Facilities for weighing and measuring organs must be available within the room.

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 uncrowded space. Instruments, containers and other items needed during the conduct of a post-mortem should be accessible within each work bay. Facilities for photography are recommended.

4.1.2.8 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;
(d) Whether a post-mortem was performed;
(e) Information about known or suspected risks such as radiation, infectious or hazardous chemicals must be communicated by person requesting the post-mortem;
(f) Body must only be released from the mortuary with the appropriate approval as stipulated in the Mortuary Procedures Manual;
(g) An authorised person from the facility must be present at the removal of the body to ensure the body is correctly identified and that all documentation is completed;
(h) The Mortuary Procedures Manual should specify the categories of staff who are authorised to receive or dispatch bodies;
(i) The mortuary must have a system that logs the movement of bodies to and from the mortuary;
(j) 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;
(k) Funeral directors should have their access to the mortuary shielded in such a manner as to prevent body transfer being seen by the public or hospital patients;
(l) Bodies suspected of harbouring infectious diseases must be contained within a body bag of approved construction, which is durable and impermeable to body fluids;
(m) Body bags must be used in cases of infection, decomposition, trauma or suspicious deaths;

(n) An indelible label, which records the full name of the deceased and at least one other identifier must be fixed directly to the body and also to the body bag or shroud;
(o) Procedures should ensure that both labels are identical.

4.1.2.9 Special Post-mortem Room for High-Risk Procedure

a) Cases designated high risk and/or dangerous pathogens include those with a known or suspected infectious disease such as HIV, Ebola Virus Disease, viral haemorrhagic fever, Hepatitis B and C, Tuberculosis, Meningococcal septicaemia and more recently COVID-19. 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 post-mortem 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;
b) The presence of known or suspected high risk infections should be notified to the mortuary staff prior to commencement of the post-mortem;
c) Autopsies presenting possible or known high risk hazards must only be performed in facilities by appropriately trained staff using post-mortem facilities which minimise the possibility of transmission of infection from the body to staff involved in the procedure.

4.1.3 PERSONNEL FACILITIES

a) Change rooms for male and female with shower facilities must be available in the mortuary;
b) Placement of boots and procedures for discarding or washing of clothing must be clearly designated;
c) Appropriate protective clothing must be available to Mortuary staff

4.1.3.1 Personal Protective Equipment

a) Standard infection control procedures ('standard precautions') must apply to autopsies and handling of bodies which are not high-risk. The Mortuary Procedures Manual must specify arrangements for high-risk autopsies, which must include the protective equipment to be worn;
b) Staff performing an post-mortem and reconstruction must wear surgical theatre type clothing, impervious outer clothing and gloves;
c) Impermeable footwear having non-slip soles must be worn by all persons working in the theatre area;

d) Surgical or post-mortem gloves must be worn by all personnel involved in the post-mortem procedure. Double gloving is required. Cut-proof gloves must be available. Staff must wear them at least on the non-dominant hand;
e) To protect against splashes, full face protection in the form of either a visor or combination of wrap around eye protection such as safety glasses and full surgical mask must be worn during autopsies and reconstruction;
f) Hoods and high filtration grade masks must be worn where there is an increased risk of aerosols;
g) Sawing of bones would constitute such a risk;
h) Respirators having appropriate filters must be available for use in suspected or known high-risk microbiological or chemical contamination.

4.1.3.2 Dealing with the Deceased

a) The Mortuary Procedures Manual must provide guidelines for the ethical standards required when dealing with deceased persons, including the need for respect for the deceased and their relatives at all times and the need for recognition and respect for cultural and religious customs and practices;
b) Mortuary staff must respect the dignity of the deceased person at all times. Deceased persons must not be left naked without covering on trolleys in the cold store or while being transported to the post-mortem theatre.

4.1.4 DEALING WITH PROPERTY AND CLOTHING

a) The Mortuary Procedures Manual must specify procedures for the handling and documentation of property and clothing;
b) It is important to have documentation of property and clothing of the body at arrival, at the mortuary and at separation from the mortuary.

4.1.4.1 Chain of Custody

All staff involved in forensic autopsies must be aware of the documented procedures essential for ensuring that the legal continuity of sample is maintained. The chain of custody must be documented and every sample, exhibit, and written report must be traceable to a particular staff member at all times.

4.1.5 RESPONDING TO BEREAVED RELATIVES

a) In the case of non-coronial autopsies, the decision to request consent for post-mortem is a clinical one and should be discussed among the clinicians. In some cases, the relative may request a post-mortem. The process for

obtaining agreement from next of kin for a post-mortem to take place in non-coronial setting and the forms documenting this agreement should be in accordance with the Code of Ethical Autopsy Practice;

b) It should be clearly documented where any limitations are placed on the post-mortem to defined regions of the body and recording the wishes of the next of kin regarding the tissues and organs which may be retained for diagnosis, research or education;
c) In autopsies, bereaved families are entitled to full, timely, sensitive, open and honest communication regarding all aspects of the post-mortem, including the need for retention of whole organs, tissue Specimens and body fluids for further examination and anticipated timeframes for release of body;
d) The facility in which the mortuary is located and those facilities which use the mortuary should have policies and procedures following death of a patient. This should include instructions on procedures for notification, instruction on how to proceed with suspected coroner's cases, dealing with the body and obtaining consent for post-mortem;
e) A section of the Procedures Manual should cover care and transport of the body to the mortuary and communication of these procedures and the responsibilities to the relatives so they can proceed with the necessary arrangements;
f) The hospital or facility responsible for the management of the mortuary should ensure that appropriately skilled personnel are available to respond to inquiries from family members and provide assistance to bereaved families. Mortuary staff occupying technical roles alone should not have this responsibility.

4.1.5.1 Viewing of The Body

a) When viewings occur, appropriate personnel must accompany the bereaved families;
b) Where adequate reconstruction is not possible or where there is an infection risk, the family should be advised.

4.1.6 CONDUCT OF A POST-MORTEM

a) The post-mortem (autopsy) is a medical and scientific investigation requiring a high level of knowledge and skill to gain the maximum useful information. Post-mortems must only be performed by a pathologist or by a person qualified as a registered medical practitioner under the supervision of a pathologist;

b) Clinicians should provide pathologists with information that will allow correlation of the clinical and post-mortem findings. The information should include written advice of any known hazards which might be presented by post-mortem, e.g. infectious agents, radiation;
c) Where implantable devices such as defibrillators and pacemakers are identified, appropriate advice should be sought with respect to deactivation, removal and interrogation.

4.1.6.1 Reconstruction of The Body

a) Medical implants in the deceased that may endanger life or property when the body is disposed of must be removed according to manufacturer's guidelines or instructions.
b) To facilitate family viewing, the body should be reconstructed where possible.

4.1.6.2 Observing the Post-Mortem

a) Observing coronial autopsies must comply with relevant legislation and should be at the discretion of the pathologist.
b) Observing the procedure during a hospital post-mortem should be at the discretion of the pathologist.
c) Consideration should be given to cultural and religious circumstances.

4.1.6.3 Reports on Post-mortem Findings

a) Post-mortem reports must be provided in a timely manner. For hospital autopsies, the pathologist performing the post-mortem or supervising the performance of the post-mortem by another medical officer should issue a preliminary report on the post-mortem findings no later than two working days after the post-mortem and should provide a final or comprehensive report within six weeks after the post-mortem;
b) Copies of the reports and/or a lay summary may be provided to the senior next of kin of the deceased on request.

4.1.6.4 Organ and Tissue Retention and Disposal

Organs and tissues for disposal following a post-mortem must be disposed of in accordance with the wishes of the next of kin or the patient's ante mortem wishes, and in compliance with the facility's policies and relevant jurisdictional legislation.

CHAPTER FIVE

5. FUNCTIONAL RELATIONSHIP DIAGRAM

For optimal function, mortuary unit shall have a path of workflow (sequence of operations) that consists of coordinated and repeatable pattern of activities enabled by systematic organisation (**Figures 3 and 4** refer).

5.1 MORTUARY FUNCTIONAL RELATIONSHIP DIAGRAM

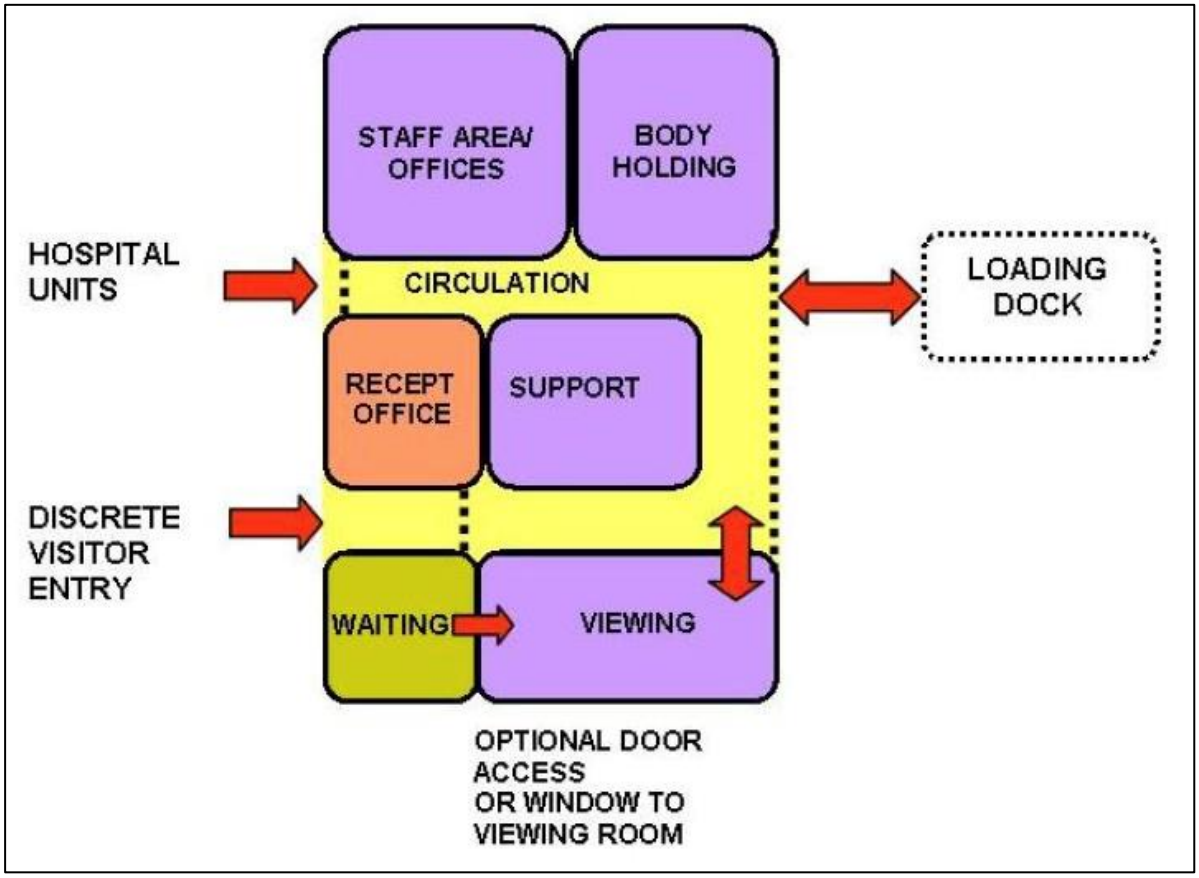


FIGURE 4: Path of workflow in a mortuary

Source:
http://healthfacilityguidelines.com/ViewPDF/ViewIndexPDF/iHFG_part_b_mortuary_general

CHAPTER SIX

6. FUNERAL HOME

A funeral home, funeral parlour or mortuary, is a business that provides interment and funeral services for the dead and their families. These services may include a prepared wake and funeral, and the provision of a chapel for the funeral.

Funeral homes arrange services in accordance with the wishes of surviving friends and family, whether immediate next of kin or an executor so named in a legal will. The funeral home often takes care of the necessary paperwork, permits, and other details, such as making arrangements with the cemetery, and providing obituaries to the news media.

6.1 FUNERAL HOME GENERAL REQUIREMENTS

a) Funeral home shall operate under the pathologists or at least a registered laboratory practitioner;
b) Funeral home shall operate in accordance with the guidelines issued from time to time by the MoHCDGEC;
c) Any person who owns a funeral home shall ensure that equipment at the facility are regularly maintained, operational and safe; and the maintenance services report or register shall be available;
d) Funeral home shall have an identified address and shall not be in residential building, hotel, bar or any other commercial or entertainment premises;
e) For funeral home located in multi-storey building, it must be located at ground level to allow easy and discrete access to deliver and/or remove body via an exit lobby;
f) The premise shall have good and proper functioning toilet, shower or bathroom, sluicing room or washing slab; according to the national mortuary guidelines;
g) The premise shall have reliable clean running water, adequate ventilation, lightning system, incinerators and burial area for sharps after sterilization; according to the national mortuary guidelines;
h) There shall be an effective communication system between the mortuary and other healthcare facility;
i) For funeral homes storing dead bodies and/or receiving dead body from health facilities, shall have a memorandum of understanding between the funeral home and the facilities bringing in dead bodies;

j) Each funeral home shall keep records of all the services provided. Such records shall be kept for at least three years before disposing off in an appropriate manner and shall be accessible for inspection by appropriate officers;
k) The costs of each funeral home services provided shall be made available to the clients.

6.2 FUNERAL HOME FUNCTIONS

a) Provision of funeral ceremony preparation connected with the final disposition of a corpse, such as a burial or cremation, in accordance with customs, beliefs, culture and practices used to remember and respect the dead, from interment, to various monuments, prayers, and rituals undertaken in their honor;
b) Provision of a wake preparation services connected with social gathering associated with death, usually held before a funeral. Traditionally, a wake takes place in the house of the deceased with the body present; however, modern wakes are often performed at a funeral home or another convenient location. A wake is also sometimes held in place of a funeral as a social celebration of the person's life;
c) Preparation for chapel or a church services connected with Christians' place of prayer and worship associated with death held before a funeral;
d) Taking care of the necessary paperwork, permits, and other details, such as making arrangements with the cemetery, and providing obituaries to the news media;
e) Moving a body between mortuaries or funeral homes or residential premises for the burial or cemetery;
f) Preparing dead body for transportation in a special coffin; when it is to be buried in a different locality than where the person died;
g) Posting obituaries online and/or use of materials submitted by families to create memorial websites.

6.3 OPTIONAL FUNERAL HOME FUNCTIONS

a) Storage of dead body;
b) Preservation of the dead body (embalming services);
c) Post mortem examination (autopsy procedures);
d) Washing and dressing the dead body and other decorations required by the clients;
e) Any other funeral home services specified by the services provider or required by the deceased relatives.

TABLE 6: Detailed situation analysis for mortuary services in 52 health facilities

CATEGORY	MORTUARY AVAILABILE	BODY STORAGE	CLIENT TOILETS	STAFF TOILETS	STORE	BODY PREPARATION	POST MORTEM AREA	OFFICE	HEAD OF MORTUARY	UNDER	POST MORTEM KIT
Dodoma	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Medical Attendant	Laboratory	Non
Manyara	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Medical Attendant	Laboratory	Incomplete
Tabora	Yes	Yes	No	No	No	No	No	No	Assistant Laboratory Technologist	Laboratory	Incomplete
Morogoro RRH	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Mortuary Attendant	Laboratory	Incomplete
Amana RRH	Yes	Yes	No	Yes	Yes	No	No	Yes	Mortuary Attendant	Laboratory	Non
Mwananyamala RRH	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Mortuary Attendant	Supportive Unit	Non
Kigoma	Yes	Yes	No	Yes	No	No	No	Yes	Medical Attendant	Laboratory	Non
Mara	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Medical Attendant	Hospital Management	Non
Pwani	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Mortuary Attendant	Laboratory	Incomplete
Lindi	Yes	Yes	No	No	Yes	Yes	No	Yes	Medical Attendant	Laboratory	Incomplete
Mtwara	Yes	Yes	No	No	Yes	Yes	No	Yes	Medical Attendant	Laboratory	Incomplete
Iringa	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Medical Attendant	Laboratory	Yes
Songwe	Yes	Yes	No	No	Yes	Yes	No	No	Mortuary Attendant	Laboratory	Non

Mbeya	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Medical Attendant	Laboratory	Non
Katavi	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Medical Attendant	Laboratory	Yes
Mwanza	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Mortuary Attendant	Laboratory	Yes
Singida	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Mortuary Attendant	Laboratory	Yes
Ruvuma	Yes	Yes	No	Yes	No	Yes	No	Yes	Medical Attendant	Laboratory	Yes
Njombe	No	No	No	No	No	No	No	No	No	No	Non
Simiyu	No	No	No	No	No	No	No	No	No	0	0
Geita	Yes	Yes	Yes	Yes	No	Yes	No	No	Medical Attendant	Laboratory	Yes
Kagera	Yes	Yes	No	Yes	No	Yes	No	Yes	Mortuary Attendant	Laboratory	Incomplete
Shinyanga	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Mortuary Attendant	Laboratory	Non
Arusha	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Mortuary Attendant	Private	Yes
Kilimanjaro	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Laboratory Scientist	Laboratory	Yes
Tanga	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Mortuary Attendant	Laboratory	Incomplete
Temeke	Yes	Yes	No	Yes	No	Yes	No	Yes	Medical Attendant	Laboratory	
Rukwa	Yes	Yes	No	Yes	No	Yes	No	Yes	Medical Attendant	Laboratory	Yes
Muhimbili	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Nurse	Director, Nursing Services	Yes
Benjamin Mkapa	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Pathologist	Laboratory	Yes

Mloganzila	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Mortuary Attendant	Laboratory	Yes
Regency	No	No	No	No	No	No	No	No	No	No	Non
TMJ	No	No	No	No	No	No	No	No	No	No	Non
Hindu Mandal	Yes	Yes	No	Yes	No	Yes	No	Yes	Mortuary Attendant	Nurse In charge	Incomplete
Aga Khan	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Mortuary Attendant	Laboratory	Non
St. Benedict Ndanda	Yes	Yes	No	Yes	Yes	No	No	Yes	Mortuary Attendant	Laboratory	Non
Nkinga	Yes	No	Yes	No	Yes	Yes	No	Yes	Mortuary Attendant	Laboratory	Non
Peramiho	Yes	Yes	No	No	No	Yes	No	No	Pathologist	Laboratory	Non
St. Gasper	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Medical Attendant	Laboratory	Non
St. Francis	Yes	Yes	0	0	0	0	No	0	0	0	0
Haydom	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Mortuary Attendant	Laboratory	Yes
Arusha Lutheran	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Mortuary Attendant	Nursing	NO
Kabanga	Yes	Yes	No	Yes	Yes		No	Yes	Mortuary Attendant	Matron	Non
Ilembula	Yes	Yes	No	No	No	Yes	No	No	Mortuary Attendant	Health Secretary	Incomplete
Nyangao	Yes	No	Yes	Yes	Yes	No	No	No	Medical Attendant	Laboratory	Non
Mbeya Zonal	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Mortuary Attendant	Laboratory	Incomplete
KCMC	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Medical Attendant	Pathologist	Incomplete
Bugando	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Pathologist	Laboratory	Incomplete
Kyela	Yes	Yes	No	Yes	No	Yes	No	Yes	Medical Attendant	Matron	Non

Murgwanza	Yes	Yes	Yes	No	No	Yes	No	No	Medical Attendant	Laboratory	Non
Igunga	Yes	Yes	No	No	No	No	No	No	Medical Attendant	Laboratory	Non
Rabinisia	No	No	No	No	No	No	No	No	No	No	No

Source: MOHCDGEC 2020

TABLE 7: Shows location of Regionalised Partners

No.	Implementing Partner	Regions
1	AGPHAI	Mwanza
		Shinyanga
		Mara
2	MDH	Dar es Salaam
		Kagera
		Tabora
		Geita
		Pwani
3	THPS	Above Site
4	UMB	TA and Above Site
5	BORESHA AFYA - SOUTHERN	Morogoro
		Iringa
		Njombe
		Mtwara
		Lindi
		Ruvuma
6	BORESHA AFYA - NORTHERN	Arusha
		Kilimanjaro
		Singida
		Manyara
		Dodoma
7	HJF-DOD	Mbeya
		Katavi
		Rukwa
		Songwe
8	AMREF HEALTH AFRICA	Tanga
		Simiyu
		Zanzibar

KEY:

TA = Technical Assistance

Above Site = Support to all regions

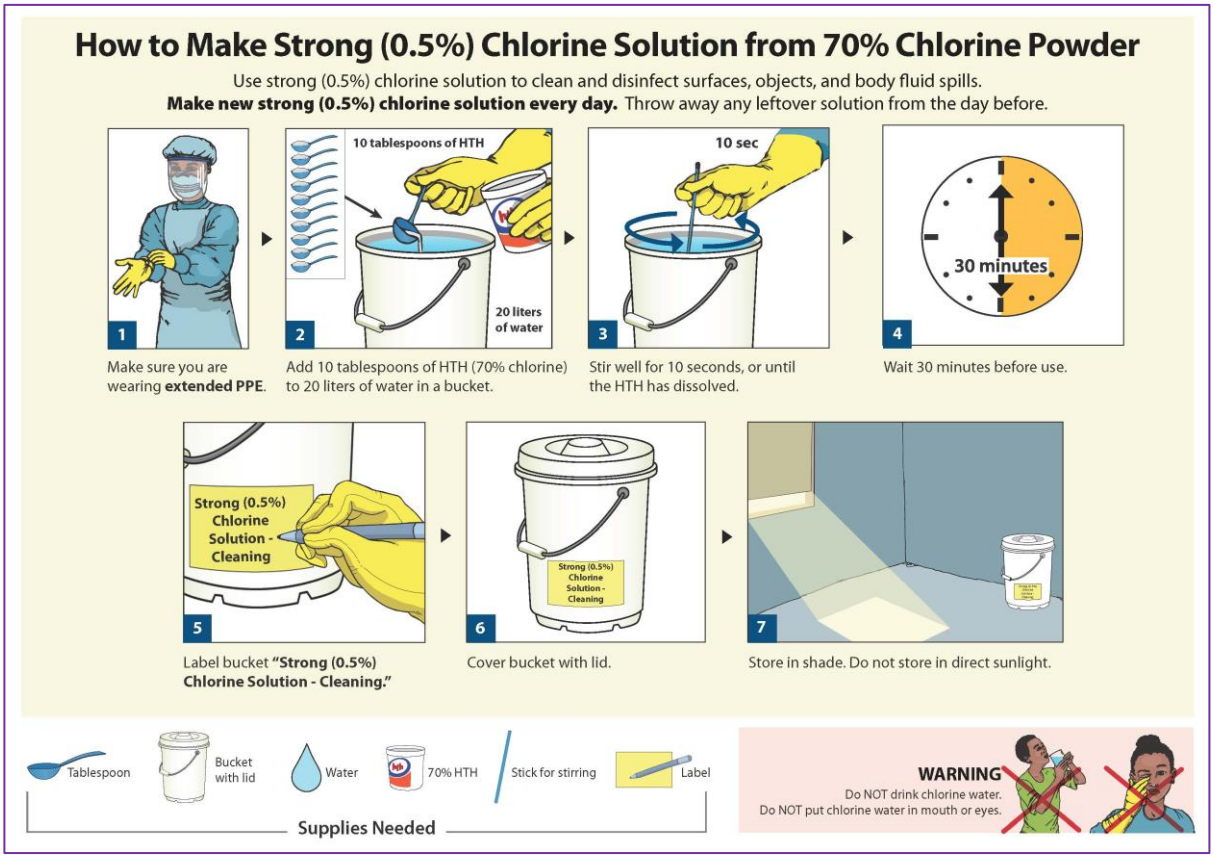
Source: PEPFAR/CDC 2020

NOTE 1: Implementing partner's regionalisation is not permanent.

ANNEX 1: Application of Chlorine Solutions in Cleaning and Disinfecting

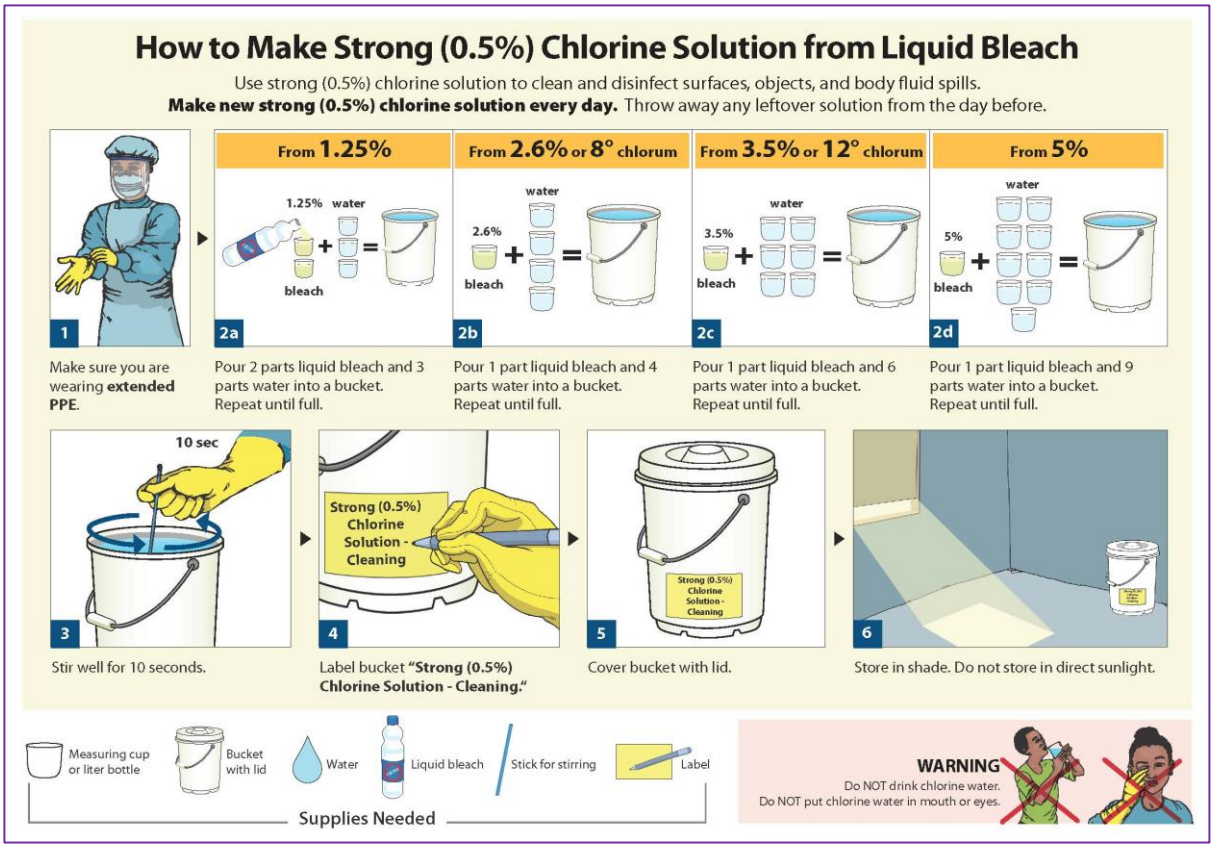
Solution	Use	Prepare using bleach (5%)	Prepare using powder (65-70%)
0.05%	Bare hand and skin, Floors and equipment, Clothing, Bedding, Vehicles.	0.1 litre bleach + 9.9 litre of water	7 grams/ 0.5 tablespoon + 10 litre of water
0.5%	Excreta, Vomit, Body fluids.	0.1 litre bleach + 0.9 litre of water	7 grams/ 0.5 tablespoon + 1 litre of water
2%	Dead body	0.4 litre bleach + 0.6 litre of water	30 grams/ 2 tablespoons + 1 litre of water

ANNEX 2: How to Make 0.5% Chlorine Solution from 70% Chlorine Powder



Source: WHO (2004) ISBN 92 9022 238 7: Practical Guidelines for Infection Control in Health Care Facilities

ANNEX 3: How to Make 0.5% Chlorine Solution from Liquid Bleach



Source: WHO (2004) ISBN 92 9022 238 7: Practical Guidelines for Infection Control in Health Care Facilities

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n) https://www.ashfordstpeters.info/patient-care/898-mortuary-viewing-policy-and-procedure;
o) https://www.jipmer.edu.in/sites/default/files/Manual%20JIPMER%20Forensic%20Medicine%20(1).pdf;
p) https://ocme.dc.gov/sites/default/files/dc/sites/ocme/publication/attachments/mortuarystandardoperatingproceduresl08.pdf;
q) https://services.nhslothian.scot/BereavementService/Policies/Deceased%20Patient%20Protocol%20Interim%20Guidance.pdf;
r) http://www.icdkwt.com/pdf/policiesandguidelines/ICforSupportiveServices/MortuaryServices.pdf;
s) https://www.iussonline.co.za/docman/document/support-services/98-hospital-mortuary-services-gazetted/file;

t) https://training.gov.au/TrainingComponentFiles/HLT07/HLTMT303D_R1.pdf;
u) https://en.wikipedia.org/wiki/Cremation;
v) https://en.wikipedia.org/wiki/Funeral_home.

NOTE PAD

NOTE PAD

TABLE 8: Shows the List of TWG Participants

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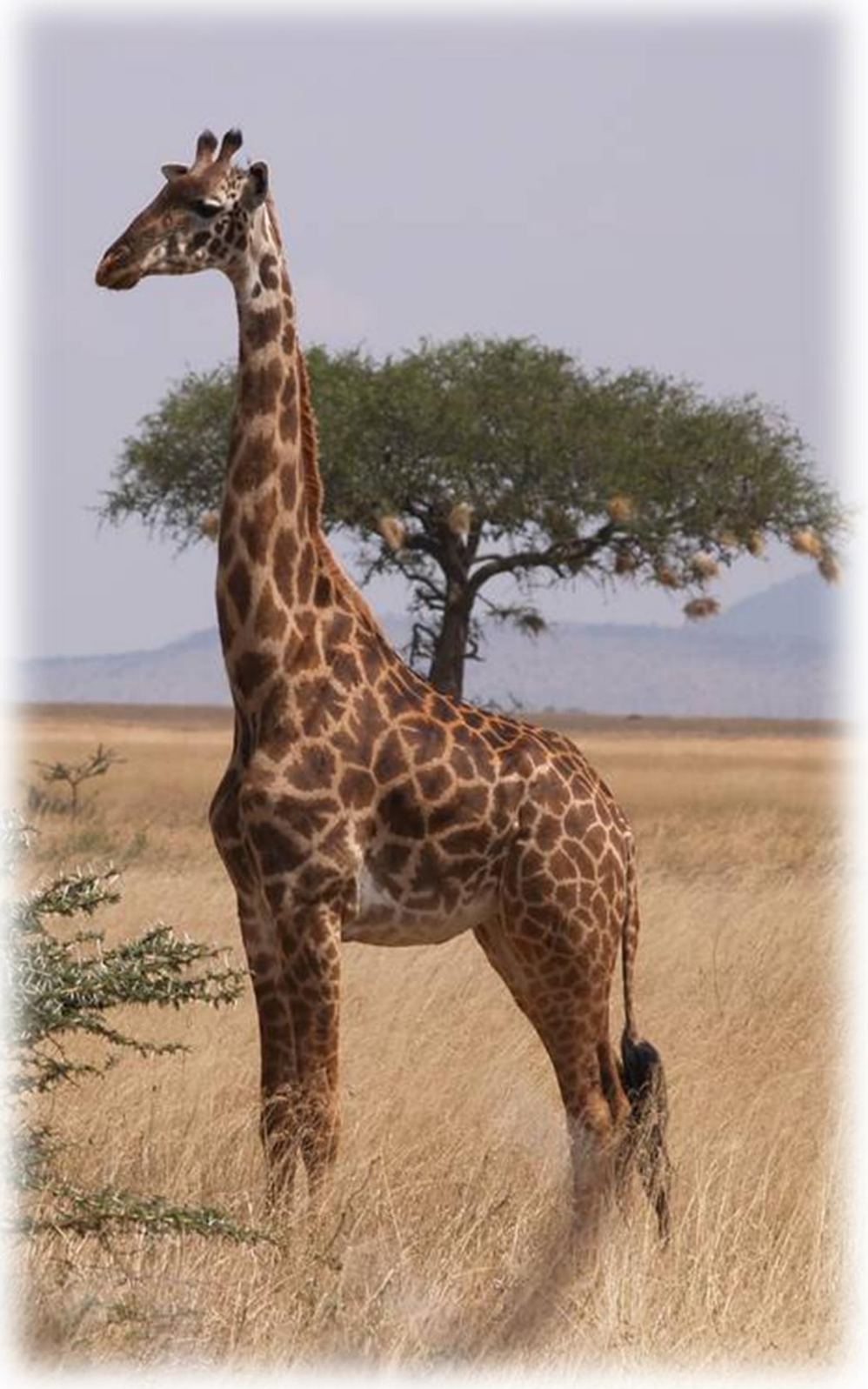

Serengeti Giraffe, Northern Tanzania

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