

## **MINISTRY OF HEALTH**

## INTERIM GUIDELINES ON HANDLING DECEDENTS SUSPECTED OR CONFIRMED FOR COVID-19

(REVISED SEPTEMBER, 2020)

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#### SCOPE

These guidelines are intended to provide direction to personnel handling decedents suspected or confirmed for COVID-19 from the moment of death to the time of interment in a safe and dignified manner. It is also envisioned to act as a reference in handling decedents during the COVID-19 pandemic and to provide standard tools for the same.

## TARGET AUDIENCE

This document will guide all personnel involved in handling of decedents suspected or confirmed for COVID-19, during the COVID-19 pandemic.

#### FOREWORD

COVID-19 is an acute respiratory disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS – COV -2), a novel corona virus that was first described in Wuhan city of Hubei Province in China towards the end of the year 2019. The disease has since spread across the globe and has consequently been declared a global pandemic by the World Health Organization (WHO).

Africa has not been spared in the spread of this virus and as of 31<sup>st</sup> August 2020 fortyseven (47) countries in the continent had reported cases. In Kenya, the first confirmed case was announced on 13<sup>th</sup> March 2020. Since then, more cases have been confirmed and there have been associated deaths. As of 31<sup>st</sup> August 2020, five hundred and ninety-six (596) deaths had been reported across the country.

There is, therefore, need to provide direction and ensure uniformity and involvement of all personnel responsible in handling decedents confirmed or suspected for COVID-19.

It is noteworthy, that these guidelines are subject to review as the pandemic evolves and more information becomes available.

Ompando

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Ag. Director General of Health

## ACKNOWLEDGEMENTS

These interim guidelines on handling decedents suspected or confirmed for COVID-19 have been developed through the contribution of many individuals and institutions that are committed in ensuring that these remains are handled in a safe and dignified manner with uniformity and involvement of all responsible personnel.

The Ministry of Health (MOH) in Kenya, extends its appreciation and gratitude to all those who have devoted their time and resources in making this work a success.

Dr. Laban Thiga Ag. Director, Directorate of Health Care Services

## **DEFINITION OF TERMS**

- Appropriate body transport vehicle (in this context) refers to a vehicle dedicated for transportation of decedents confirmed for COVID-19 that is easy to decontaminate
- Appropriate PPE Refers to personal protective equipment that is suitable for a particular medical procedure or activity
- Appropriate PPE for interment Refers to personal protective equipment that is suitable for purposes of interment ensuring safety and avoiding undue stigma
- Confirmed COVID-19 case Refers to a person or decedents from a deceased person who has tested positive for a confirmatory test for COVID-19
- COVID-19 Refers to an acute respiratory disease caused by SARS-CoV-2 that mainly affects the lungs and is associated with mental and neurological manifestations amongst others.
- Death in Hospital Refers to a death within a hospital setting where medical management is offered such as a ward
- Death in the community Refers to a death occurring outside a hospital setting where medical management can be offered such as a ward
- Decedent A deceased person
- Dignified Showing or worthy of respect
- Full PPE Refers to a complete set of personal protective equipment intended for use in a setting that poses high risk for biohazard exposure
- Interment The burial of a corpse in a grave or tomb, typically with funeral rites
- Mortuary A room or building in which dead bodies are kept, for hygienic and safe storage or for examination, until burial or cremation
- Mortuary team A team comprising mortuary attendants and any other personnel who may be co-opted to handle the body of a deceased person
- **OB number** Refers to a unique serialized reference obtained as an extract from the occurrence book at a police station
- Personnel People employed in an organization or engaged in an organized undertaking such as healthcare
- Safe Protected from or not exposed to danger or risk
- SARS COV 2 Virus Refers to the severe acute respiratory syndrome corona virus,
   2, the causative agent for COVID-19
- Specimen Refers to part of a whole that is sent to a laboratory for testing
- Suspected COVID-19 case Refers to a person or decedents of a deceased person reporting signs and/or symptoms or radiological features that fit the case definition for COVID-19 but without a positive confirmatory test
- Verbal autopsy Verbal autopsy (VA) is a method of determining an individuals' causes of death and cause-specific mortality fractions in populations without a complete vital registration system. Verbal autopsies consist of a trained interviewer using a questionnaire to collect information about the signs, symptoms, and demographic characteristics of a recently deceased person from an individual

familiar with the deceased.

• View and Grant post mortem examination – Refers to a non-invasive procedure which involves an experienced pathologist externally examining the body of a deceased person whilst considering the deceased's history and the events surrounding the death. The pathologist will confirm that a full post mortem examination is required if they are not in a position to certify the cause of death on the basis of a View and Grant examination.

## LIST OF ABBREVIATIONS

BID

- Brought in Dead CDC
  - Center for Disease Control and Prevention CHW
- Community Health Worker . CHV
- Community Health Volunteer DFPS
- Division of Forensic and Pathology Services HCP
- Healthcare Personnel IPC
- Infection Prevention and Control . MITS
- Minimally Invasive Tissue Sampling MOH
- Ministry of Health . NP
- Nasopharyngeal OP
- Oropharyngeal OB
- Occurrence Book PAPR
- Powered, air-purifying respirators PFA
- Psychological First Aid PHO
  - Public Health Officer PPE
- Personal Protective Equipment PM
- Postmortem PUI
- Persons under investigation PVC
- Polyvinyl chloride
- SARS-CoV-2 Severe Acute Respiratory Syndrome Corona Virus 2 WASH . Water, Sanitation and Hygiene

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WHO

World Health Organization

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#### **1** INTRODUCTION

COVID-19, also referred to as coronavirus disease 2019, is a communicable respiratory disease caused by a new strain of corona virus that causes disease in humans. The disease spreads from person to person through infected air droplets that are projected during coughing or sneezing. It can also be transmitted when persons have contact with hands or surfaces that contain the virus then touch their eyes, nose or mouth with the contaminated hands.

The disease was first reported in China but has since spread around the world. In February 2020, the World Health Organization (WHO) declared COVID-19 a global pandemic. This pandemic has had far reaching effects in the health systems and economies of the world. It has resulted in many infections and as of 31<sup>st</sup> August 2020, there was a total of 25.1million infections and 843,633 deaths globally.

In Kenya, the number of infections has continued to rise since the first case was announced on 13<sup>th</sup> March 2020. These infections initially arose from international travel but over time the country has continued to report cases arising from community transmission. The severity of this disease in the country has varied from asymptomatic infection to severe illness with deaths being reported. By the end of August 2020, five hundred and ninety-six deaths had been reported.

Management of decedents suspected or confirmed for COVID-19 requires a well guided and coordinated approach that abides with the relevant laws of the land and ensures a safe and dignified send-off of the departed.

This guideline, therefore, will serve to give direction to all personnel involved in handling decedents suspected or confirmed for COVID-19 and provide tools necessary in documentation and reporting the process.

#### 2 DEATH IN THE COMMUNITY Steps in handling decedents in the Community

- 2.1 The community informs the local administration (police, chief, CHW, public health call center).
- 2.2 The personnel receiving the call advises the community not to handle the body in any way until the public health team or the police arrive.
- 2.3 Any of the local administration informed, informs the sub county public health officer
- 2.4 The sub county PHO informs the county pathologist/medical officer to evaluate the history of the deceased and determine the type of death (forensic, COVID-19 associated and non-forensic non COVID-19)
- 2.5 The pathologist or medical officer in counties may reach out to the Division of Forensic and Pathology Services (DFPS) at MOH for technical assistance, whenever needed.
- 2.6 All deaths in the community must be reported to the police and an occurrence book (OB) number obtained
- 2.7 All forensic death scenes must be attended by the police (and a pathologist if required).
- 2.8 All non-forensic non-COVID-19 deaths will be processed by the local chief and a D2 permit for burial issued, as per the existing death registration protocols.
- 2.9 Once a determination of a COVID-19 associated death has been made the county pathologist/medical officer informs the sub county PHO to assemble a team, which may include some medical laboratory personnel where the diagnosis had not been confirmed.
- 2.10 The sub county PHO has to ensure that all requirements as per checklist (annex 1) are in place before embarking on body retrieval and/or on site sampling.
- 2.11 At the scene of death, the PHO ensures crowd control (with support from relevant institutions) in a bid to ensure social distancing.
- 2.12 The PHO identifies the key informant(s).
- 2.13 The PHO introduces him/herself and those present and explains the objective of their visit.
- 2.14 The medical laboratory personnel fill out the case investigation form, for cases where diagnosis had not been made.
- 2.15 The team dons PPE (personal protective equipment) as per the guidelines (annex 2).
- 2.16 The team collects the samples as per the sample management guidelines (annex 3).
- 2.17 The first body bag is unzipped and placed parallel and next to the body. The body is rolled into the unzipped body bag.

- 2.18 The body bag with the body in it is zipped up with both pull tabs of the zipper together.
- 2.19 The body bag with the body is the placed into a second body bag which is zipped closed and both pull tabs of the zipper bound to lock in the body.
- 2.20 The entire external surface of the outer body bag is disinfected with 0.5% chlorine solution by spraying
- 2.21 The body is loaded onto an appropriate body transport vehicle and transferred to the mortuary.

#### **3** DEATH IN HOSPITAL

- 3.1 If a death occurs less than 24 hours of arrival to the hospital it must be reported to the nearest police station and an OB obtained.
- 3.2 The person responsible in the hospital where the death has occurred contacts the hospital PHO/pathologist/medical officer.
- 3.3 The pathologist/medical officer will determine the type of death (forensic,
- 3.4 COVID-19 associated and non-forensic non COVID-19)
- 3.5 All non-forensic non-COVID-19 deaths will be processed and permit for burial issued as per existing guidelines.
- 3.6 Once a determination of a COVID-19 associated death has been made the hospital pathologist/medical officer/hospital PHO assembles a mortuary team, which may include some medical laboratory personnel where the diagnosis had not been confirmed.
- 3.7 At the scene of death, the PHO ensures there is appropriate social distancing.
- 3.8 The mortuary team identify the key informants.
- 3.9 The mortuary team introduces themselves.
- 3.10 The medical laboratory personnel fill out the case investigation form for cases where diagnosis have not been made
- 3.11 The team dons PPE as per the guidelines (annex 2)
- 3.12 The medical laboratory personnel collect the samples as per the sample management guidelines (annex 3)
- 3.13 The 1<sup>st</sup> body bag is unzipped and placed parallel and next to the body
- 3.14 The body is rolled into the unzipped body bag.
- 3.15 The bag with the body in it is zipped up with both pull tabs of the zipper together.
- 3.16 The body bag with the body is the placed into a second body bag which is zipped closed and both pull tabs of the zipper bound to lock the contents.
- 3.17 The entire external surface of the outer body bag is disinfected with 0.5% chlorine solution by spraying
- 3.18 The body is loaded onto an appropriate body transport vehicle and transferred to the mortuary.

## **4** TRANSPORTATION OF DECEDENTS

- 4.1 The sub county PHO supervises the loading of the decedents into the transport vehicle. In addition, the PHO, instructs the driver that the decedents must not be interfered with at any point enroute.
- 4.2 The decedents should remain enclosed within the transport vehicle.
- 4.3 A decedents transport vehicle must be designated solely for this purpose and be easy to decontaminate.
- 4.4 Ambulances are not recommended for this purpose.

### 5 DECEDENTS STORAGE

- 5.1 The mortuary shall have a designated labelled refrigerated area for storage of COVID-19 associated decedents at a temperature of  $2 6^0$  C.
- 5.2 The decedents shall be logged into the admission register (annex 5) and issued with a unique reference number/identifier.
- 5.3 A body tag bearing the unique reference number/identifier should be securely fastened through both pull tabs of the zipper on the outer bag.
- 5.4 The body is transferred from the vehicle to the designated storage area
- 5.5 While in storage, the following <u>shall not</u> be carried out on decedents testing positive for COVID-19:
- 5.6 Tampering with (or opening the body bag) the body
- 5.7 -Washing
- 5.8 Embalming
- 5.9 Autopsy (dissection), except in a negative pressure autopsy suite that has the requisite equipment
- 5.10 Any other procedure that may interfere with safety of staff or community as guided by the PHO/Pathologist

## 6 POST MORTEM EXAMINATION

- 6.1 An external examination (view and grant) may be carried out (at the time and location) of body retrieval depending on the circumstances of death, by a pathologist and/or medical officer.
- 6.2 All-important external findings shall be document and filed for future reference
- 6.3 A verbal autopsy may be carried out to determine cause of death, by a pathologist and/or medical officer

## 7 AUTOPSY (BODY DISSECTION)

- 7.1 Whereas autopsies are highly important procedures, they can only be safely carried out where the requisite conditions have been met, including but not limited to, the presence of a negative pressure autopsy suite with other attendant requisite equipment.
- 7.2 Minimally invasive tissue sampling (MITS) may be considered if the necessary engineering controls are met for safety

### 8 INTERMENT

- 8.1 The sub county PHO in whose jurisdiction the decedents are stored shall communicate well in advance with his/her counterpart at the intended sub county of interment.
- 8.2 Interment shall take place within 48 hours from the time of death.
- 8.3 The release of the decedents from the mortuary to the place of interment shall be supervised by the sub-county PHO in whose jurisdiction the decedents are stored.
- 8.4 The decedents shall be logged into the dispatch register (annex 5) and a copy of the burial permit obtained for filing.
- 8.5 The refrigerated storage area where the decedents are stored is opened and disinfected using 0.5% chlorine solution.
- 8.6 The bagged decedents are removed from the refrigerated storage area and placed into a casket (if desired) or shrouded with a sadda (if desired) or any other safe method, as guided by the PHO/Pathologist.
- 8.7 The refrigerated area where the decedents had been stored is disinfected using 0.5% chlorine solution again.
- 8.8 The body once placed in the casket, the exterior of the casket shall be disinfected using 0.5% chlorine solution before being loaded into the transport vehicle.
- 8.9 The body bag /casket shall not be reopened for viewing.
- 8.10 Touching or kissing of the body is prohibited.
- 8.11 The interment process shall be carried out by the family under the guidance of the sub-county PHO in whose jurisdiction the interment is taking place, allowing any safe burial rites as may be dictated by the religion and/or culture of the deceased person. Where the family is not available or is not able to carry out the interment, sub-county PHO will constitute a team to offer a safe and dignified interment for the deceased person.
- 8.12 The burial team shall comprise of four pallbearers donned in appropriate PPE for interment (surgical scrubs, medical mask, safety googles, disposable water-proof-surgical gown, gumboots, additionally a rain coat may be needed in rainy weather).
- 8.13 The number of pall bearers may be more or less than four as guided by the PHO/pathologist
- 8.14 The decedents shall be transferred from the transport vehicle directly into the grave/cremation chamber.
- 8.15 Prayers before interment (if desired) shall be held while the decedents are still in the transport vehicle.
- 8.16 The number of persons at interment shall not exceed 15 (or such a number as will be determined by the stage of phased re-opening in the country) and the allocated time for the interment ceremony shall not exceed 1 hour (or such a duration as will be determined by the stage of phased re-opening in the country).
- 8.17 After interment, the transport vehicle is disinfected using 0.5% chlorine solution by spraying.

8.18 The entire interment process shall follow the procedure for COVID 19 bodies disposal (annex 4)

#### 9 DATA MANAGEMENT

- 9.1 9.1 All mortality data shall be fully entered in requisite registers and forms at mortuaries (annex 5).
- 9.2 9.2 Confidentiality and security of data must be maintained at all times
- 9.3 Analyzed mortality data shall be transmitted to relevant offices (county, MOH DFPS) on a monthly basis or as required using standard data collection and reporting tools (annex 6)

#### **10 SPECIMEN MANAGEMENT**

- 10.1 Specimen collection shall be carried out by appropriately trained medical personnel on specimen collection.
- 10.2 Appropriate PPEs (annex 2) shall be used during specimen collection.
- 10.3 Specimen collection, packaging, transportation and storage shall be carried out as per the sample management procedures (annex 3)
- 10.4 The specimen will be sent to approved laboratories for testing

### 11 MENTAL HEALTH AND PSYCHOSOCIAL SUPPORT

- 11.1 Mental health and psychosocial support will be offered to the grieving families and health care workers handling COVID-19 associated deaths
- 11.2 The county mental health and psychocial support (MHPSS) focal person will link the family to a mental health and psychosocial counseller for mental health /psychological for support
- 11.3 The Mental health and psychosocial counsellers will identify persons requiring immediate support/pychosocial fisrt aid (PFA)
- 11.4 The mental health and psychosocial counsellers offer debrifing to the HCWs handling COVID-19 associated deaths
- 11.5 Mental health and psychosocial counsellers will link those who need further support for care
- 11.6 Mental health and psychosocial counsellers will collect data on families and help in family intergration if and when required

#### 12 PERSONNEL

The following are some of the key personnel and their key responsibilities are:

12.1 Pathologist

To determine if the death is forensic or non forensic

To direct the manner in which the decedents should be handled

To carry out post mortem examination (view and grant) where necessary

To prepare burial permit and register of death (indicating the cause of death)

#### 12.2 Medical officer

With guidance from the county/DFPS pathologist: To determine if the death is forensic or non forensic To direct the manner in which the decedents should be handled To carry out post mortem examination (view and grant) where necessary To prepare burial permit and register of death (indicating the cause of death)

#### 12.3 PHO

To acts as the link between the community and the medical officer/pathologist To mobilise the mortuary team

To oversee and guide retrieval of decedents from scene of death

To ensure disinfection of any possible areas of contamination

To oversee and co-ordinate the interment process

12.4 Medical Laboratory Personnel Specimen management

12.5 Mortuary attendantsTo evacuate of decedents from the location of deathT enter relevant data into requisite registersTo ensure proper storage of the decedents as per guidelinesTo conduct the interment of decedents

12.6 Health records and information personnelTo analyze mortality data and transmit to relevant offices

#### 12.7 CHW/CHV

To report death in the community to relevant authorities/institutions To act as a link between the community and the PHO/pathologist/Medical officer/chief/police

12.8 Police OfficersTo record COVID-19 associated deaths in the OBTo issue OB numberTo control crowds as requiredTo handle crime scene investigation and management

12.9 Local administration Chief (office of the president)To receive report on death in the communityTo act as a link between the community and the police/PHO/pathologist/medical officerTo issue D2 for burial of non-COVID, non forensic deaths

12.10 Mental health and psychosocial counsellers

To offer mental health and psychosocial support to the bereaved families, community and health care workers

To offer counselling services to the bereaved families, community and health care workers

12.11 Clergy and religious leaders

To offer burial rites for deceased persons

#### **13 REFERENCES**

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## **14 14. ANNEXES** 14.1 Annex 1

Requirements for COVID 19 body retrieval and/or on-site sampling check list



Ministry of Health

MOH NO:

**COVID 19 BODY RETRIEVAL AND/OR ON-SITE SAMPLING CHECK LIST** Facility Name / Locality County

S/No	ITEM	NUMBER RECEIVED	NUMBER RETURNED	REMARKS
1.	Coverall		RETURNED	
2.	Nitrile gloves			
3.	Surgical gloves			
4.	Gynecological gloves			
5.	Goggles			
6.	Face Shield			
7.	Medical masks			
8.	N95 masks			
9.	Shoe covers			
10.	Body bags (2)			
11.	Biohazard bags			
12.	Paper towels			
13.	Nasopharyngeal swabs			
14.	Oral pharyngeal swabs			
15.	VTM			
16.	Case investigation forms			
17.	Marker pen			
18.	Scissors			
9.	0.5% chlorine solution			
20.	Water container			
21.	Cool box with ice packs			
22.	Hand sanitizer			

23.	Hand held spray bottle	
24.	Biro pens	
25.	Cotton wool	

### 14.2 Annex 2

Standard Operating procedures for Mortuaries and Funeral Homes Donning and Doffing Procedures for Morticians COVID-19 Deaths

#### 14.2.1 DONING OF PPE

#### **STEP 1**

Ensure that a trained donning and doffing buddy is available to verify compliance with all the steps

The trained observer should review the steps with the HCW, using a checklist and read the donning sequence to the health care worker before starting the process

#### STEP 2

Ensure that all needed supplies are available Impermeable shoe covers N95 respirators Face shield Googles Impermeable coverall Plastic apron Gloves with extended cuffs Plastic Heavy-duty gloves Freshly prepared bleach 0.5% Alcohol based hand rub Cotton wool Forceps Body Bags Head Gear Gum Boots Sprayer (Knapsack or hand held bottle) Scrubs Marker Pen Waste Disposal bag

#### STEP 3

Prepare for donning of PPE Perform Hand Hygiene Wear scrubs Wear Gum boots Remove watch, jewelry and empty pocket contents Secure hair

#### **STEP 4**

Inspect PPE items prior to putting on. Using a checklist ensure all items are available Ensure they are in good working condition Make sure that the size is correct. Adequate in number

STEP 5

Put on boot cover

**STEP 6** Perform hand hygiene

**STEP 7** Put on inner gloves

#### **STEP 8**

Put on coverall Make sure its large enough for free movement Make sure cuffs of the inner gloves are tucked under the sleeves of the coverall. Zip up STEP 9

Make thumb holes at the bottom of cuff and sleeve. Use scissors to make small incision. Insert the thumb through the incision to secure the coverall

#### STEP 10

Put on the N95 mask Cup the mask in your hand with the nose piece at the finger tips. Position the N95 mask under your chin with nose piece up Start with top strap resting it on the top of your head then the bottom strap dropping it to the back of the head under the ears. Mold the nose piece

#### STEP 11

Seal check Cup the mask tightly and inhale deeply and feel the respirator suck in. Sharply exhale and check if air is escaping through the edges. If air escapes re adjust or get a fitting size

STEP 12 Put on googles

#### STEP 13

Put on outer plastic apron

Use a simple knot for easier removal

#### STEP 14

Put on outer glove. (with long sleeves) Ensure the cuffs are pulled over the sleeves of the coverall

#### STEP 15

Put on the hood

Cover the hair, ears and the neck leaving no skin exposed.

#### Step 16

Wear the face shield (if no goggles were donned) **STEP 17** Let the trained observer check the worn PPE. Make sure all skin surface is covered Ensure to maintain range of movement e.g., hand extension, waist bending, head turning.

#### 14.2.1 DOFFING OF PPE

Disinfect outer gloves Use 0.5% chlorine solution Remove apron Remove apron by breaking from the neck Avoid contamination by rolling apron from inside out Disinfect outer gloves with 0.5% Chlorine solution Remove boot covers Use a hand-free approach by stepping at the back of the boot cover and lifting the foot Touch only the inner side of the boot cover Disinfect outer gloves Remove outer gloves Do not contaminate the inner glove Inspect and disinfect inner gloves If torn remove gloves, do hand hygiene and don a new pair of gloves Remove hood Unfasten hood, grasp the back of the hood and carefully remove by pulling backwards Do not touch the inside of the hood Disinfect the inner gloves Remove goggles Lift back of strap over the head and pull out and away from the body Avoid touching the front surface of the goggles Remove coverall Avoid contact with outer surface of the coverall Lift chin Find the zip from the level of your belly Trace the fingers up to find the zip tab and fastener

Hold the top of the coverall with one hand Unfasten completely before rolling down and turning inside out Avoid contact of scrubs/clothes with the outer surface of the coverall. Touch only the inside of the coverall Roll coverall from inside and dispose Disinfect and remove gloves Perform hand hygiene Put on new pair of gloves Remove the N95 respirator Lean slightly forward Grab and remove the bottom tie or elastic strap Then grab and remove the top tie or elastic strap Drop the N95 mask without touching the front of the N95 in a waste receptacle Perform hand hygiene Disinfect the washable boots Sit on a clean chair Start at the top and finish with the sole Disinfect and remove gloves Perform hand hygiene Inspect for any contamination

#### 14.3 Annex 3 Standard Operating proceedures for Martin

## Standard Operating procedures for Mortuaries and Funeral Homes

## Sample Collection on Decedents Due to COVID-19 Deaths

#### Introduction

All decedents should be handled as highly infectious and suspected to be positive COVID-19. All bodies brought in dead (BID) should be swabbed for COVID-19 test and handled as such until the results are received.

## PPE Requirements as per guidelines (annex 2)

## Sample Collection Requirements

0.5% sodium hypo chloride solution.
Hand sanitizer.
Virus transport medium (VTM).
Nasopharyngeal swab and oropharyngeal swab.
Pair of scissors.
Marker pen.
Cool box with ice packs
Sprayer
Case investigation form

#### **Responsible Person**

The responsibility of sample collection rests with the Pathologist/ Medical Laboratory Personnel

or is conducted under their guidance

#### Precautions

Ensure appropriate use of PPE (annex 2).

Ensure all personnel are trained in safe handling practices and spill decontamination procedures. Place specimens for transport in leak-proof specimen bags (triple packaging).

Deliver all specimens by hand, whenever possible.

Fill out all required areas in the case investigation.

Indicate the samples are from a deceased person at the top of the first page in bold

#### Procedure for Sample Collection

Confirm that all the necessary items are available.

Label the specimen collection tube and the zip lock bags.

Perform the donning procedure with your assistant or buddy.

The assistant to unseal the swab and pass it on.

Insert the swab through the nostril parallel to the palate (not upwards) until resistance is encountered.

The distance is equivalent to that from the ear to the nostril of the patient, indicating contact with the nasopharynx.

Gently rub and roll the swab then leave in place for several seconds to absorb secretions. Slowly remove swab while rotating it.

If a deviated septum or blockage create difficulty in obtaining the specimen from one nostril, use the same swab to obtain the specimen from the other nostril.

The assistant opens the VTM tube and help you cut the upper portion of the swab as you immerse the specimen then cover with the screw cap.

Put the specimen in 3 zip lock bags then put in the cool box.

Perform the doffing process then transport the specimen to the laboratory. Mmanage waste and perform hand hygiene as per the doffing protocol

## 14.4 Annex 4 Standard Operating procedures for Mortuaries and Funeral Homes

#### Disposal of Decedents Due to COVID-19 Deaths

#### **PPE** requirements

Gloves Mask Eye protection Scrubs Gown Apron Rubber boots or foot cover Head Covers

#### Introduction

Allowed interment methods are burial or cremation within 24-48 hours

Interment must be supervised by a public health officer guided by a pathologist and must follow MOH guidelines.

International best practices must be followed when handling COVID-19 infected bodies

Observe socio-cultural and religious rituals as far as is safe, practicable and in line with government rules

Handle all decedents with dignity and care and burial should be done during the day

The authorized medical practitioner should issue the burial permit expeditiously.

Embalming or washing of bodies is NOT permitted

Cremation should NOT be the carried out on unidentified remains

The body bag or coffin should not be opened once closed

Sample collection is performed as per sample collection procedure (refer to sample collection procedure).

Use 0.5% chlorine solutions for disinfection of surfaces, body bags and fumigation

## Death occurs within an urban area

At mortuary, Don in full PPE as per the donning and doffing procedure

Body will have been double bagged at the point of death

Place in coffin or wrap in Sanda (2 white sheets) if Muslim,

Disinfect the coffin or Sanda and carry the body to the vehicle

Transport to the cemetery, perform religious and cultural rites observing IPC/Government guidelines

Bury the body or cremate body (which ever applies)

Disinfect any equipment using 0.5% Chlorine solution that came into contact with the coffin or Sanda, including the vehicle that transported the body

Doff at site, perform hand hygiene,

Manage the waste at site, perform hand hygiene

Board a clean vehicle back to facility

#### Death in the community

If death occurs in the village (home) within the community-

Avoid unnecessary manipulation touching and religious rites that compromise safety

Police are notified who then notifies the regional Public Health officer

PHO then notifies the county pathologist or medical officer

The pathologist of medical officers conducts a verbal autopsy or view and grant postmortem examination as necessary to determine the cause of death

PHO prepares to retrieve the body and collect samples as per checklist.

Team prepares all requirements for donning, sample collection and a case investigation form where specimen collection is required.

At site, team introduces itself to the family and community (avoid crowding)

The team together with family members fills the case investigation form

Team dons as per procedure away from where the deceased body is (refer to donning and doffing

procedures).

Sample collection is performed as per sample collection procedure (refer to sample collection procedure).

Place the body bags on the floor. Roll the body in the primary body bag, Zip and place in the second body bag.

Cleaning and disinfection of surfaces and clothing items that may have been contaminated is done under the guidance of the PHO

#### Long distance travel for burial

Death occurs far from interment site or county of burial

Double bag and transport to the mortuary as per procedure

At the mortuary store at 2°C to 6°C as per procedure,

On the day of travel disinfect the body bag and place in coffin or wrap in Sanda or any other safe method as per the religious and/or cultural beliefs

The family is guided by PHO on safety precautions during the burial process (including use of face masks, hand hygiene, social distancing, avoidance of the burial ceremony by people over the age of 60 years and those who may be unwell among other safety precautions) Load the body in the transport vehicle

The PHO at point of departure communicates with his/her counterpart and local administration at the sub-county of burial with details of vehicle, time and accompanying team or any other requirement as per the stage of phased re-opening of the country.

Proceed with burial/ cremation of the body

#### Mass Burials

Mass burials may be carried out if the number of COVID -19 associated deaths overwhelm the capacity of the individual families

Mass burials may be carried out in

Cases of identified individuals

Cases of unidentified individuals

Mass graves should consist of a trench holding a single row of bodies

Each placed parallel to the other 0.4 m apart and the graves should be a minimum of 3 meters' deep

Distance from water sources should be taken into consideration, at least 350m from drinking water sources

Each body must be buried with a unique reference number as a permanent tag or weather proof label.

Place beacons to indicate positions of each body

Permanent records and photos of the mass burial site must be kept by the PHO

Cremation is not recommended unless where culturally/religiously permissible and in line with the law and where the deceased persons have been identified

#### Burials for unidentified Bodies

Detailed documentation to be done before disposal for future possible reference.

The following should be captured in the documentation:

Unique reference number

Photographs: face, whole body, upper body and lower body and any unique identifiers e.g. tattoos, piercings

Samples for DNA analysis and fingerprints may be taken if very necessary but adequate caution should be taken to avoid risk of infection transmission. This should be done on a case by case basis

Records must be maintained for future reference

Any skin disease or injury should be adequately protected with gloves or dressing to avoid contamination and infections

Frequently perform hand hygiene

14.5 Annex 5 Requisite mortuary registers 14.5.1 Admission register



Ministry of Health

MOH NO: MORTUARY ADMISSION REGISTER Facility Name: County

S/ No	Name	Age /DO B	Gen der	Date of death	Date of admiss ion	Adm issio n num ber	OP/IP No.	Place	of deatl	1	Type of deat h (clin ical/f oren sic)	Cau se of deat h	Ad mitt ed by (na me of mor ticia n)	Admitt ed by (name of PHO)
								Hos pital/ villa ge/es tate nam e	Sub coun ty	Cou nty				

## 14.5 Dispatch register



Ministry of Health

MOH NO:

### **MORTUARY DISPATCH REGISTER** Facility Name County

Admi ssion No.	Na me	Age/ DOB	Gend er	Date of dispat ch	Autopsy done		transfer		ch for Dispatch for disposal		Relea sed by (nam e of morti cian)	Relea sed to (nam e of PHO)	Name and conta ct of next of kin	
					Date	Facili	Cou	Mort	Cou	Cou	Sub			
						ty Name	nty	uary name	nty	nty	cou nty			
_	-													
		Sec. 1												

14.6 Annex 6Mortality data collection tools14.6.1 Facility mortality data collection tool



Ministry of Health

### MOH NO: MORTUARY POSTMORTEM AND CAUSE OF DEATH REGISTER Facility Name

County

Name of Dece ased	Age/ DO B	Gen der	Pathole MO		Date of Post morte m	Place		Date of Death	Poli ce Stat ion	O B No	Cause of Death		
			Name	Cont act		Na me of vill age/ esta te and sub- cou nty	Hospi tal name and IP/OP numb er				immed iate	underl ying	Other signific ant conditi ons
												-	

filed by (name of officer at facility)	
Personal / ID number	
Date	• •
Date	

Received by (name of health records officer at Cour Personal	nty)
Date	••••••
Forwarded to ((name of health records officer at Na	tional)
Personal	

.....

14.6.2 County mortality data collection tool

MOH NO:



Ministry of Health

#### MORTUARY POSTMORTEM AND CAUSE OF DEATH REGISTER County Name:

				Co	ounty Na	me:										
Name of Dece ased	Age/ DO B	Gen der	Patholo MO	ogist/	Date of Post morte m	Place	Place of death		Poli ce Stat ion	Poli ce Stat	Poli ce Stat	Poli ce Stat	O B No	Cause o	f Death	
			Name	Cont act		Na me of vill age/ esta te and sub- cou nty	Hospi tal name and IP/OP numb er				immed iate	underl ying	Other signific ant conditi ons			
													201223			

Filed by (name of health records	s officer at the County)
Personal number	······
Date	······

Forwarded to ((name of health records officer at DFPS)	
Personal	
Date	

Received by (name of health records officer a	t DEPS)
Personal	(DITS)
Personal Date	·····
Date	

14.6.3 National data collection tool



#### Ministry of Health

MOH No:

# NATIONAL MONTHLY POSTMORTEM AND CAUSE OF DEATH DATA CAPTURE SHEET

Month..... Year....

Number	r and cau	ise of de	eath( by p	ost	m	orte	m)							
County	r and cause of death( by postmorter Homicide						Acci dent al	Suic ide	Nat ura l dea th	Mate rnal death	Infa ntici de	CO VI D 19	Oth ers	Tot al
Mombasa	Firea rm	Trau ma	poison ing	others										
Kwale														
Kilifi							19 39 30							
Tana River														
Lamu														
Taita Taveta														
Garissa														
Wajir														
Mandera														
Marsabit														
Isiolo														
Meru														
Tharaka														
Nithi														
Embu														
Kitui														
Machakos														-
Makueni														

Nyandarua								
Nyeri		-						
Kirinyaga								
Muranga				-	1111111111	-		
Kiambu								
Turkana								
West Pokot								
Samburu								
TransNzoia								
Uasin Gishu								
Elgeyo Marakwet								
Nandi								
Baringo								
Laikipia								
Nakuru					1			1211
Narok								
Kajiado								
Kericho								1.
Bomet								
Kakamega								
Vihiga								
Bungoma								 
Busia								
Siaya								
Kisumu								-
Homa bay								
Migori							+	
Kisii								
Nyamira								
Nairobi City								
Totals								