



# **Part 1. GENERAL GUIDANCE FOR THE MANAGEMENT OF THE DEAD WITH CONFIRMED OR SUSPECTED COVID-19**

## **Part 2. PROTRACTED RESPONSE TO INCREASED DEATHS FROM COVID-19**

**ICRC FORENSIC UNIT**

This guidance should be read in conjunction with the general guidance for management of dead bodies contained in "[\*Management of Dead Bodies after Disaster: A Field Manual for First Responders\*](#)", Revised and Updated 2<sup>o</sup> Edition (2016), WHO/ICRC/IFRC.



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# GENERAL GUIDANCE FOR THE MANAGEMENT OF THE DEAD WITH CONFIRMED OR SUSPECTED COVID-19

To all public and private institutions, health care and death care workers involved in the management of the dead in any of its various stages: Planning and coordination, site of death/ recovery, transport, examination, identification, storage, handover to families and burial/cremation

**ICRC FORENSIC UNIT**

This guidance should be read in conjunction with the general guidance for management of dead bodies contained in "[\*Management of Dead Bodies after Disaster: A Field Manual for First Responders\*](#)", Revised and Updated 2<sup>o</sup> Edition (2016), WHO/ICRC/IFRC.



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# Technical Recommendations for Healthcare and Death care workers

## GENERAL CONSIDERATIONS



- COVID-19 emergency response should include considerations for those who die from the disease. **The health and safety of all those directly involved in the management of the dead is a priority and they should be provided with the appropriate personal protective equipment.** All measures taken, including policies, regulations and practice must demonstrate **respect towards the deceased individuals and their families and of affected communities.** Policy and practice should uphold the **dignity of the dead and must demonstrate respect towards the deceased individuals and their families.**



- Permanent and effective **communication and coordination** between all agencies involved and other service providers is essential. Ensure **proper communication** with the public. The rights of the families should be respected. The bereaved should be provided with **relevant information.**



- Every effort should be made to ensure the **timely and reliable identification, documentation and traceability of the dead.** The process for relatives to obtain all related documents, such as death certificates, death registration and burial permits should be facilitated.



- The management of the dead from COVID-19 should not impede the **medico legal investigation of death** where required (i.e. unexpected or suspicious deaths, deaths in custody).

# Technical Recommendations for Healthcare and Death care workers



## GENERAL CONSIDERATIONS



- Use of standard personal protective equipment (PPE)
  - Gloves, wear heavy-duty gloves over the disposable gloves.
  - Aprons
  - Long sleeved gowns or overalls
  - Face masks: FFP3 masks or N95 respirators
  - Eyes protection: Face shields or goggles
  - Boots or shoe protection



- Do not make contact with your face and mouth, as well as food, drink, or eating and drinking utensils, during body handling and wash your hands rigorously after body handling.



- Remove personal protective equipment safely and dispose of disposable items responsibly



- Disinfect any non-disposable equipment.



# Technical Recommendations for Healthcare and Death care workers



## GENERAL CONSIDERATIONS



- Staff must be specifically trained for the task of managing the dead and the use of Personal Protective Equipment (PPE).
- **During postmortem examinations**, extreme caution should be applied (i.e. double surgical gloves, cut-proof gloves, FFP3 masks or NIOSH-certified disposable N-95 respirator or higher)
- Existing cultural / religious practices should be respected while taking into consideration and simultaneously preventing further exposure and propagation of the virus.
- Use body bags. One body bag for infectious cases or two standard field body bags if possible.
- Personal effects, before being returned to relatives, consider disinfection.
- Documentation and stationery used in the process should be disinfected accordingly.
- Transport the body to the mortuary (or disinfection location if no post-mortem examination will occur) as soon as possible.

# Technical Recommendations for Healthcare and Death care workers



## GENERAL CONSIDERATIONS

- Where required the forensic procedures recommended by the ICRC for the identification of the dead are applicable to the identification of those infected with COVID-19.
- Remains Infected with COVID-19 with persistent agent may pose a cross contamination hazard to unprotected people hence visual recognition by next of kin should be strictly controlled and follow the necessary precautions, including the wearing of PPE. Consider that in certain cases remains may have decomposed beyond the point where visual recognition is reliable.
- If possible, designate a temporary holding area where to conduct identification (and post mortem examinations). This will help avoid overwhelming and contaminating normal mortuary facilities and endangering their staff, which will be expected to manage routine case work.





# Technical Recommendations for Healthcare and Death care workers



## TEMPORARY STORAGE AREAS



- Is a place where recovered bodies can be safely stored until arrangements can be made for their disposal.



- Staff working in the temporary holding area must wear appropriate PPE always.
- Disinfection of body bags upon arrival at the temporary holding area.
- If possible, place original body bag containing the remains inside of a second bag.
- Disinfection of the outer bag following the identification or post mortem procedure.
- Records should be kept of all movements of human remains within the temporary holding area.



# Technical Recommendations for Healthcare and Death care workers



## FINAL DISPOSAL OF REMAINS / HAND OVER TO RELATIVES



- If final disposal is to take place off-site the outer bag should be thoroughly disinfected prior to release from the site.



- Cremation of **unidentified** human remains should be avoided, and burial in marked single graves is the preferred method of disposal.



- Bodies should be buried in their respective and labelled body bags, regardless of the use of coffins. Do not commingle bodies to save on supplies.



- **Personal belongings** of the deceased infected with COVID-19 may present a cross contamination hazard. Consideration should be given to decontamination of such possessions prior to handing them over to the next of kin with chain of custody.



- Decontamination procedures can be divided into those for the staff undertaking the management of the dead procedures (along with their equipment) and decontamination of the human remains. The exact method chosen should follow the standard procedures for COVID-19 and the use of recommended disinfectants.



# **PROTRACTED RESPONSE TO INCREASED DEATHS FROM COVID-19**

A Preparatory Guideline for  
Mass Fatality Response Plan

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## GENERAL CONSIDERATIONS



- The deceased may belong to **vulnerable communities** living in shelters or on the street. They may be a migrant, refugee or a person separated from their family which may prevent their relatives from assisting in the identification or immediately claiming their body.



- All bodies, including the unidentified and unclaimed, stored in temporary facilities or buried must be **tracked and be accounted for**. In cases of burial this requires cemeteries to be accurately mapped and the graves visibly demarcated. All burials should be registered, and the graves physically identified with a reference marker specific to each body. Cemeteries should be respectfully maintained and protected.



- A preparedness **plan needs to ensure the capacity to deal with any surge in fatalities alongside expected caseloads**, including the welfare of staff and affected communities. It should address those logistical challenges posed; access to trained staff, transportation, equipment, physical structures needed for storage of bodies and performance of burials according to cultural and religious needs. In addition to healthcare facilities, plans should include measures specific to, inter alia, **penitentiary centers and fragile communities** (i.e. refugee camps, displaced communities). The plan would help to improve the resilience of people affected and the institutions in the aftermath of a crisis.





## PLANNING



- Conduct a preliminary evaluation and risk assessment. Describe occupational health and safety requirements that protect responders and practitioners.
- Establish a dissemination mechanism to educate responders.
- Use input from all actors with the relevant mandates to deliver proper management of the dead, ensure the dignity of and respect to the deceased individuals and their families and to undertake investigations where appropriate.
- Describe the multi-agency communication and coordination mechanism.
- Not all death from COVID-19 will occur in a medical facility. Proper training and supervision must be provided to first or emergency responders.
- Basic management of the dead practices, including procedures for tracking labelled bodies, should be followed and are essential in all cases.





## PLANNING



- Ensure adequate attention to families of the deceased. Define a public communication strategy.



- Consider financial, administrative and logistical support for all the steps of the response: Recovery, examination, identification, storage and burial / return of bodies to families.



- Additional arrangements might be required to increase the capacities for single graves and ensure respect for and dignity of the deceased.

- Special arrangements might be required for easy and fast registration of death and authorization for burial.



- It should also describe policies and procedures in relation to managing unclaimed and unidentified bodies and their temporary disposition.





## MANAGEMENT AND COORDINATION

- Is there a designated structure to coordinate the Government response?
- Identify focal points of each of the agencies, clarify roles and responsibilities on the different phases of the MotD: Recovery and transportation of the deceased, postmortem examinations if required, identification of the deceased, storage and disposal, burial and handover to families, death registration, attention and information to families.
- Any participation by volunteers or private businesses follow the same procedures.
- A good understanding of the local capacities for MotD, mainly in relation to transportation, storage and body disposal is a baseline to determine further steps.
- Ensure as much as possible, sufficient capacity in terms of infrastructure, human resources, materials and self-protective equipment to respond to the increase number of deaths. The coordination group should resort on alternatives for additional support if needed.





## RECOVERY AND TRANSPORTATION OF THE DECEASED



- Outline arrangements for transporting the dead bodies considering who is responsible for this task, if they have sufficient capacities, if cases require involvement of law enforcement authorities and accompanying documentation, if a site has been designated as temporary storage?
- Identify the support required in terms of vehicles, infrastructure, materials, human resources. Identify alternative sources for support and ensure their understanding of their role in the broader response.



## MEDICAL CERTIFICATE, DEATH CERTIFICATE, DEATH REGISTRATION



- Any specific guidance/regulation to consider in pandemic cases in order to facilitate administrative procedures and limit exposure of relatives and other death care workers.





## POSTMORTEM EXAMINATIONS IN GENERAL AND WITHIN THE MEDICO LEGAL DEATH INVESTIGATION SYSTEM. Infectious and Routine cases

- Local authorities should take measures to ensure that medico legal services continue to be provided. A contingency plan should be established to properly provide management of the dead services to victims of the pandemic and other non-pandemic related cases.



## BODY STORAGE

- Establish a mechanism to coordinate the procurement, staffing and storage of all bodies, identify potential facilities / premises suitable for body storage.
- The coordination group should be informed about the existing body storage capacity. Existing facilities may be found within hospitals, public and private funeral homes and forensic services. Consider military / University assets. Additional body storage must be addressed in advanced.
- During the MotD it is especially important in the storage and transportation phases that body identification and labelling is carried out meticulously.





## VIEWING OF BODIES

- A family viewing area should be facilitated, it is important to allocate an appropriate and comfortable waiting areas for families, following also general recommendations for public spaces in the framework of the pandemic.
- Minimum requirements: Hygienic rooms, sensitive to the bereaved needs and beliefs, with washing facilities and ensure trained professionals oversee the viewing arrangements. Cemeteries: Follow recommendations for burial of bodies as per the MotD in disasters. Consider issues such as permits, land availability and legislation, etc. Temporary burial of bodies may be necessary.



## BODY DISPOSAL / BURIAL / CREMATION

- Cemeteries. Follow recommendations for burial of bodies as per the MotD in disasters. Consider issues such as permits, land availability and legislation, etc. Temporary burial of bodies may be necessary.





## REPATRIATION OF DECEASED

- Be aware of local regulations, procedures, and concerned authorities that go beyond the routine death (such as consulates, border authorities, authorities of the receiving country). A coordination group should establish contact with concerned authorities responsible for issuing repatriation permits in both countries.
- Generally, a Freedom from Infection Certificate is required that is normally issued by the forensic practitioner or the attending physician.

## **Essential Practical Questions that would help in the rapid assessment of the existing health and death care systems to respond to the increased deaths !**

- Does a Mass Fatality Response Plan or Annex related to death management exist to guide the multiagency response in an increase in deaths from COVID-19?
- What is the level of commitment / involvement / support of the Government at central level to setup or activate a contingency mass fatality plan ?
- What are the current capacities and capabilities of all agencies involved in the management of deaths? (Infrastructure, Human Resources, Equipment)
- What percentage of increased case load would overwhelm agencies at their current capacity and trigger the activation of the plan?
- Are the current personnel adequately trained in safety precautions and equipped with appropriate personal protective equipment to handle a surge in infectious disease cases?
- Have arrangements been made with non-government groups and the corporate sector to secure additional support as well as to procure additional equipment?
- Does the plan insist on dignified and professional management of deceased persons and respect in terms of engagement and complying with the wishes of the families and communities affected?
- Do the law enforcement community and medicolegal practitioners have the additional resources to ensure that all sudden and unexpected deaths are thoroughly investigated even during an infection outbreak?
- Does the plan provide guidance towards compliance with protection of personal information legislation and regulations?
- Will the families and communities (and media) be able to rely on regular, reliable and transparent communication from competent source that represents all response agencies and groups?
- Who will recover deceased persons from their homes and what training and equipment will they receive to protect themselves and the bereaved families in an infectious disease outbreak?
- What labeling and body tracking methods are conducted to effectively manage large numbers of bodies accumulating in mortuaries?
- Is there a standardized file management (including standardized forms) process to ensure all facilities and agencies involved work coherently and collaboratively in one system that allows for centralization of all data related to the management of the death?
- How will caseload information be centralized to assist with further planning and targeted deployment of additional resources and equipment?
- Are there sufficient cemetery spaces and/or crematorium operations to receive and respond in a timely manner to the increase in deaths?
- What is the short and long term approach to managing unclaimed and unidentified bodies?
- What administrative processes and additional support will ensure that families receive medical certificates of death, burial permits, autopsy reports and other important documentation to resolve financial affairs, estates, etc.
- Who will pay for the additional personnel, facilities and the activities themselves during a protracted mass fatality event.

! These questions are also applicable in the assessment of the response in place by Detention Centers in case of sudden increase of number of deaths in custody related to the pandemic.





# Communities



- Protection, Dignity and Respect of the dead and their families



- Possibility for families to bid farewell to dying loved ones; Families respectfully informed of the death of a loved one;



- Families receiving documentation of death needed for estate matters and other legal and administrative obligations; Family members know where to turn for information and support;
- Dignified treatment of remains and (temporary) burial in a culturally-appropriate manner; Storage / burial of remains while ensuring identity, identification and traceability;



- Dispel public health myths and fears about dead bodies; Reduce risks of stigmatization of those handling human remains through clarification of existing prevention measures.



- Authorities responsible for and those working with the dead are aware of potential risks and mitigation measures and basic health and safety in place;

# COVID-19 BASIC MEASURES

## FOR HEALTH AND DEATHCARE WORKERS IN THE HANDLING OF THE DEAD

The wearing of Personal Protective Equipment (PPE) is standard practice for the handling of the deceased and should be carried out in line with standard Health and Safety procedures. Health and deathcare workers should take precautions when handling the remains of individuals who have died from COVID-19.

## PUTTING ON PPE CORRECTLY



**USE STANDARD PERSONAL PROTECTIVE EQUIPMENT (PPE) FOR BODY HANDLING.**

### 1. PUT ON SHOE COVERS OR BOOTS

Standard rubber boots which can be disinfected after use or shoe covers that can be disposed of.



### 2. WASH YOUR HANDS THOROUGHLY



### 3. PUT ON GOWN

Clean, long-sleeved fluid-resistant or impermeable gown to protect skin and clothing.



### 4. PUT ON APRON



Waterproof.

### 5. PUT ON RESPIRATOR



Use FFP3/ 2 or N95 respirator as deemed appropriate

### 6. PUT ON FACE SHIELD OR GOGGLES



Protect the face, eyes, nose, and mouth from splashes of potentially infectious bodily fluids.

### 7. PUT ON GLOVES



Nonsterile, nitrile gloves when handling potentially infectious materials. If there is a risk of cuts, puncture wounds, or other injuries that break the skin, wear heavy-duty gloves over the nitrile gloves.



**Policy and practice must uphold respect towards the deceased individuals and their families and should not undermine the dignity of the dead.**



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# COVID-19 BASIC MEASURES

## FOR HEALTH AND DEATHCARE WORKERS IN THE HANDLING OF THE DEAD

The wearing of Personal Protective Equipment (PPE) is standard practice for the handling of the deceased and should be carried out in line with standard Health and Safety procedures. Health and deathcare workers should take precautions when handling the remains of individuals who have died from COVID-19.

## DURING

### USE BODY BAGS



Use one body bag designed for infectious cases.  
If it is not available, use two standard field body bags.

### LABEL BODY BAGS



Label the body bags containing human remains properly.  
Record all movements of the body.

### TRANSPORT



Transport the body to the mortuary (or a disinfection location if no post-mortem examination will occur) as soon as possible.

## AVOID



**Avoid contact with your face and mouth, as well as food, drink, or eating and drinking utensils.**



**Do not engage in any other activity during the body handling or preparation process.**



**Policy and practice must uphold respect towards the deceased individuals and their families and should not undermine the dignity of the dead.**



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# COVID-19 BASIC MEASURES

## FOR HEALTH AND DEATHCARE WORKERS IN THE HANDLING OF THE DEAD

The wearing of Personal Protective Equipment (PPE) is standard practice for the handling of the deceased and should be carried out in line with standard Health and Safety procedures. Health and deathcare workers should take precautions when handling the remains of individuals who have died from COVID-19.

## REMOVING PPE CORRECTLY



USE THESE STANDARD PRACTICES TO REMOVE PERSONAL PROTECTIVE EQUIPMENT.

<b>1. SHOE COVERS</b>  Remove shoe covers. (if applicable)	<b>2. APRON</b>  Remove apron only touching uncontaminated parts.	<b>3. GLOVES</b>  Remove gloves together.	<b>4. HAND HYGIENE</b>  Perform hand hygiene.
<b>5. GOWN</b>  Removal of gown by assistant only touching uncontaminated parts.	<b>6. FACE SHIELD OR GOGGLES</b>  Remove face shield or goggles.	<b>7. RESPIRATOR</b>  Remove respirator.	<b>8. WASH HANDS</b>  Wash hands thoroughly after body handling and prior to eating or drinking.



**Disinfect any non-disposable equipment** being used during the handling of the remains as per standard practice.



**Dispose used personal protective equipment** to ensure they do not come into contact with people, food, drink, or eating and drinking utensils. Biohazardous waste incineration is best.



**Disinfect boots after use.** If using shoe coverings, dispose of it.



**Disinfect surfaces** that may have come in contact with the infected body.



**Policy and practice must uphold respect towards the deceased individuals and their families and should not undermine the dignity of the dead.**



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# MANAGEMENT OF COVID-19 RELATED DEATHS

## KEY CONSIDERATIONS AND RECOMMENDATIONS FOR MANAGERS



The death management process should be able to continue even with the pressure of many cases while maintaining the welfare of the staff and of the affected communities.



Safety and wellbeing of staff is the first priority. Ensure all necessary equipment is provided as well as the required guidance and support throughout the process.



In all situations and in line with standard Health and safety procedures, wearing personal protective equipment (PPE) is standard practice for the handling of the deceased. A risk assessment should be conducted to determine that the recommended level of PPE is adhered to prior to handling COVID-19 infected bodies.

The following personal protective equipment (PPE) should be used during body handling and preparation process.

<b>GOWN</b>  Clean, long-sleeved fluid-resistant or impermeable gown to protect skin and clothing.	<b>GLOVES</b>  Nonsterile, nitrile gloves when handling potentially infectious materials.	<b>APRON</b>  Waterproof.
<b>BOOTS</b>  Standard rubber boots which can be disinfected after use or shoe covers that can be disposed of.	<b>FACE SHIELD OR GOGGLES</b>  To protect the face, eyes, nose, and mouth from splashes of potentially infectious bodily fluids.	<b>RESPIRATOR</b>  Use FFP3/2 or N95 respirator as deemed appropriate.

The highest risk for body handlers may come from working in environments overcrowded with infected people. When properly worn, the recommended PPE provides adequate protection.



Ensure that all are briefed on health and safety measures, such as those recommended by the health authorities and the World Health Organization (WHO).



Every effort should be made to ensure the reliable documentation, identification and traceability of the dead and the certification of death. By all means, avoid quick and careless disposal of bodies of individuals who have died due to COVID-19.



Effective communication and coordination among all agencies involved and other service providers is essential.



The families and loved ones of the deceased should be given relevant information, especially on the status of infection of the deceased.



Policy and practice must uphold respect towards the deceased individuals and their families and should not undermine the dignity of the dead.



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# COVID-19 BASIC MEASURES

## FOR HEALTHCARE AND DEATHCARE WORKERS IN THE HANDLING OF THE DEAD (FOR ISLAMIC BURIALS)

Safety and well-being of staff is the top priority. Ensure all necessary equipment is provided as well as the required guidance and support throughout the process.

In all situations and in line with standard health and safety procedures, wearing Personal Protective Equipment (PPE) is standard practice for the handling of the deceased. A risk assessment should be conducted to determine that the recommended level of PPE is adhered to prior to handling COVID-19 infected bodies.

### ✓ THE FOLLOWING PPE SHOULD BE USED DURING BODY HANDLING AND THE PREPARATION PROCESS

When worn properly, the recommended PPE provides sufficient protection. The highest risk for body handlers may come from working in overcrowded environments alongside infected people.



### THE FOLLOWING PRECAUTIONARY MEASURES ARE RECOMMENDED FOR ISLAMIC BURIALS



#### 1. GHUSL (WASHING)

- Perform *ghusl* as normal, if permitted.
- If not: Pour or merely spray water on the body, if permitted.
- If not: Perform *tayammum* (dry purification), if permitted by the Islamic and health authorities. If not, for some Muslim scholars, passing a wet hand over the entire body bag will suffice.
- If it will not or if all the above is not permitted: The body must be buried without doing any of the above.
- Avoid direct contact with blood or body fluids from the body.

#### 2. KAFAN (SHROUDING)

- Shroud the body as normal, if permitted.
- Disposables should be treated as medical waste.
- Place the body in the coffin/casket and close the lid as normal.
- Wipe the outside of the coffin/casket and trolley, and allow to dry.

#### 3. SALAT AL-JANAZAH (PRAYER)

- The funeral prayer may take place.
- It should be performed in a cemetery or an open space.
- It may be performed by a minimum of two Muslims.
- If two or more people attend the funeral, they must keep at least 1.5 metres apart to avoid the risk of infection.
- The number of people burying the body in the grave should be kept to a minimum.

- ✓ Ensure that everyone has been briefed on health and safety measures, such as those recommended by the health authorities and the World Health Organization (WHO).
- ✓ Every effort should be made to ensure the reliable documentation, identification and traceability of the dead and the certification of death. The bodies of people who have died due to COVID-19 must never be disposed of quickly and carelessly.
- ✓ Effective communication and coordination among all agencies involved and other service providers is essential.

The families and loved ones of the deceased should be informed of the person's death, including given relevant information, especially on the status of infection of the deceased.



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## إلى أي حد يجب أن تصل معايير السلامة للوقاية من تفشي كورونا؟



من المهم أن تتضمن خطة الطوارئ الخاصة بالاستجابة للفيروس اعتبارات تعنى بالذين قد يموتون بسبب المرض.

يجب على جميع المشاركين في التعامل مع المتوفين : استخدام معدات الحماية الشخصية المناسبة.

يجب أن تُظهر التدابير والسياسات المتبعة لإدارة هذه الحالات الاحترام للأفراد المتوفين وعائلاتهم والمجتمعات المتضررة، ويجب أن تحفظ كراماتهم.

إن مشاركة معلومات علمية دقيقة وحقيقية، يمكنها الحد من توتر الآخرين.

