

Safe body handling
and mourning ceremonies
for COVID-19 affected
communities:

Implementation guidance for National Red Cross and Red Crescent Societies



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Introduction

The Red Cross Red Crescent Movement has extensive experience supporting safe Management of the Dead (MotD) in infectious disease outbreaks. This includes procedures and approaches designed to prevent transmission of epidemic diseases after death through body handling or funerals. This guidance aims to help National Societies during the implementation of the main recommendations provided in the existing guidance for the MotD in COVID-19 related scenarios, namely handling of the dead during recovery, transportation, preparation and storage procedures, as well as in support of safe body handling procedures and mourning ceremonies led by local authorities or communities themselves (see annexes). In most outbreaks, the bodies of people who have died from epidemic diseases are not considered infectious and pose minimal risk when being handled using universal precautions¹. COVID-19 is a newly-emerged infectious disease caused by the SARS-CoV-2 virus. It is easily transmitted between the living, and with unknown transmission risk from the dead; some special precautions are recommended to reduce the risk to body handlers, healthcare and deathcare workers and all those involved in the management and handling of the dead.

This document outlines general principles for the management and handling of the dead related to COVID-19. The first section of the document provides further information and main recommendations in relation to the involvement of National Societies in the MotD in COVID-19 related cases. The second section includes recommendations according to different scenarios in which National Societies are or might be involved in supporting local authorities and/or communities such as handling of the dead by healthcare and deathcare professionals, COVID-19 mass fatality management and supporting community-led adaptations of body preparations for burial or cremation, and safe mourning ceremonies. The final section contains information about maintaining regular MotD activities and capacities during COVID-19 outbreaks. Illustrated guidance on personal protective equipment (PPE) lays out the necessary precautions and protections required for different activities and contexts in the MotD process, including body preparations for burial/cremation and adaptations to body transportation and mourning practices.

The MotD should always include identifying the deceased and establishing the nature and circumstances of any sudden or unexpected death. This is the responsibility of the authorities and not the Red Cross Red Crescent. National Societies may, in exceptional circumstances, be called upon to support body handling activities including recovery and transport of the dead, storage and mortuary procedures, and burials or cremations or other activities supporting safe handling of the dead at the community level.

¹ A responder can never exclude the possibility of the deceased person having infectious disease conditions, such as HIV, tuberculosis or hepatitis, for which precautions should always be taken regardless of an epidemic.

General principles

Planning or implementing activities related to handling bodies and burials or cremations related to COVID-19 should be always framed by the following principles:

- The first priority is the safety and well-being of staff, families and communities.
- Protection and preservation of life should always be the priority, and confirmation of death should be carried out by a legally authorized medical practitioner and/or in accordance with local standards.
- Authorities should make every effort to confirm the identity of the dead, including proper documentation and traceability of bodies.
- The dignity of the deceased and of their next of kin must be respected at all times.
- The MotD for COVID-19 should not impede the medico-legal investigation of death when required by the authorities (e.g. suspicious deaths, unexplained deaths, accidents and suicides, deaths in custody, etc.).
- To manage the large number of deaths from COVID-19, it may be necessary to increase human and material resources, including building, enhancing or adapting local capacities and support to communities.
- Burial support programming should consistently aim to provide the highest level of protection with the lowest possible level of intrusion. Prioritize identifying mutually acceptable modifications to traditional body preparations and funeral practices, which continue to meet the social, cultural and religious needs of affected families and communities.

National Society involvement in the safe body handling and mourning ceremonies in COVID-19 related deaths

- Before engaging in any activities related to the MotD, from recovery of bodies to preparation and final disposition (e.g. burial or cremation), National Societies should conduct a preliminary evaluation and risk assessment.
- Death should always be confirmed by a suitably qualified medical practitioner as determined by legislation. Do not assume death, confirm it.
- It is important to jointly discuss with health authorities and other entities involved in the response to better establish the magnitude of the pandemic in a given context and define the potential role of the National Society and members of the community.
- Together with health authorities and other entities involved in the emergency response, as well as local communities if applicable, assess hospital or healthcare centres, mortuaries, cemeteries, crematoriums or burial places and funeral and religious services to identify possible gaps in capacities, resources or processes.
- Establish roles and responsibilities amongst all entities involved in the response, based on their mandated authorities and level of expertise and resources to perform the activity professionally.
- Staff and volunteers undertaking recovery of human remains infected or suspected to be infected with SARS-COV-2, which causes COVID-19, must be specifically trained for the task of MotD and the use of the appropriate PPE.
- Engage with communities to ensure all cultural and religious practices are considered and that communities understand and accept measures taken in the response to the pandemic. Where potential conflict arises, efforts should be made to ensure that safeguarding measures are understood, accepted and supported by the concerned community or religious authorities and the next of kin, and adaptations should be made until an appropriate and acceptable solution can be found.
- Ensure that PPE is properly worn and used only as required in relation to exposure risk (see Annex 4, Illustrative guidance and information on PPE in Annexes 1 and 2)

- Distribute guidelines, posters or any other communication material to management, practitioners, communities.
- Only personnel who have been trained and have the required materials should handle the body of someone who has died of COVID-19 to prepare the body for transport or burial/cremation. Relatives and cultural or religious leaders can prepare the body, with appropriate training/guidance and equipment. National Society teams trained in ICRC's standard MotD need additional orientation on body handling for this infectious disease.
- **Technical recommendations for body handling/preparation procedures are included in detail in corresponding sections of the guidance in Annex 1. Specific guidance for community-led body handling and mourning ceremonies are included in Annex 2.**

Scenarios for National Society involvement in the management of the dead

1. Handling of the dead by healthcare and deathcare professionals

«Body handler» refers to any individual involved in the physical handling of bodies. This includes, but is not limited to, healthcare practitioners and healthcare assistant personnel, deathcare workers including forensic doctors, pathologists and other forensic experts, and autopsy technicians, non-forensic personnel charged with recovery and transportation of bodies, individuals involved in body preparation for final disposition (e.g. burial or cremation), for funerals or other commemorative events. National Societies affected by this guidance are those that may be involved in COVID-19 care units, or in the recovery and transportation of dead bodies.

2. COVID-19 mass fatality management

There is a high potential risk for a significant increase in the number of fatalities in a very short time overwhelming local capacities, with the subsequent additional pressure on the health and medico-legal systems, as well as on other service providers involved in the MotD. In a scenario with increased deaths, it is possible that not all patients get medical attention or go to a medical facility, with death occurring at home. In all cases, body preparation procedures will also be affected and a coordinated approach will need to be implemented by communities to ensure body handling in preparation for burial, cremation or other culturally appropriate final disposition are safe and meet communities' social, cultural and religious needs. Recommendations to develop and implement a mass fatality response plan in case of an increase in the number of deaths due to COVID-19 are included in Annex 1 (Part 2). Guidance on how to prepare long-term storage and burials in case of increased deaths is included in Annex 3.

3. Supporting community-led safe body handling and mourning ceremonies

The first priority of safe community-led body handling and mourning ceremonies is to carry out the least intrusive, most culturally appropriate body preparation and funeral possible while reducing the risk of transmission of the virus that causes COVID-19, through either handling the body of the deceased or through mass gatherings without physical distancing at the place of mourning. National Societies, in their support to communities affected by COVID-19 outbreaks, should prioritize support to families and community and religious leaders to adapt their traditional body preparations and mourning ceremonies to allow for safe body preparations and physical distancing in ways that continue to meet affected people's social, cultural and religious needs.

In communities with active transmission of COVID-19, all funerals and mourning gatherings, whatever the cause of death, should be modified to facilitate physical distancing between mourners, as people can be infected with the virus and contagious without showing symptoms. When preparing bodies for burial or cremation, additional protective measures are only required for people who have died of suspected or confirmed COVID-19. Body preparations do not need to be adapted for people who are confirmed to have died of other causes.

There are three general scenarios for National Society support to community-led adaptations to body preparations and mourning ceremonies, increasing in complexity and potential for community resistance. Before beginning burial support operations, National Societies should identify the underlying body preparation and mourning practices and work with local community leaders to identify acceptable adaptations. The "lightest touch" possible should be employed, to reduce the impact on mourning families and communities. Therefore, National Societies should prioritize supporting those already or traditionally involved in family- or community-led body preparations, burials, cremations, and/or mourning ceremonies, and only directly carry out body preparations when no alternatives exist.

1. Advise and equip family members, traditional leaders, religious leaders and others who typically lead body preparation, mourning ceremonies and final disposition of the dead
2. Advise, equip and supervise body preparations, mourning ceremonies and final disposition of the dead led by family members, religious leaders, or others traditionally involved
3. Directly carry out body preparations and burials/cremations, allowing for adapted mourning ceremonies (rare cases where no family, traditional attendants or authorities are available to prepare, or bury/cremate the deceased)

See Annex 2 for guidance for safe community burials in the context of COVID-19

4. Maintaining regular MotD activities and capacities

Disasters and emergencies requiring MotD may also occur during the COVID-19 pandemic, and could require response from National Societies equipped, trained and mandated to provide auxiliary support. As standard MotD mandates equipment to protect against a variety of health risks and hazards, existing guidance and PPE recommendations are sufficient to reduce the risk of post-mortem COVID-19 transmission in this context. However, MotD staff and volunteers should be oriented on the COVID-19 burial guidance to ensure that practices are up to date.

See *Management of Dead Bodies after Disasters: A field manual for first responders* (second edition) for implementation guidance.

5. Illustrated guide to protective measures during handling dead bodies in the context of COVID-19

Illustrated guidance has been developed to visually identify the recommended PPE needed for different environments, activities and levels of risk of exposure. It also serves as a reminder that COVID-19 does not pose the same risk as pathogens like Ebola. It is also important to note that currently PPE is in short supply across the world. It is, therefore, very important that responders wear PPE responsibly and conservatively to avoid causing unnecessary panic and prevent PPE from running out and thereby causing increased risk for those who perform handling of the dead in communities. These illustrative recommendations are a supplement to existing guidelines that have been drafted by the Movement and assist in providing an illustrative set of recommendations about the PPE to be worn.

See Annex 4

Annex 1

COVID-19: GENERAL GUIDANCE FOR THE MANAGEMENT OF THE DEAD ICRC FORENSIC UNIT



This document provides guidance on the management, or handling, of the remains of people believed or confirmed to have died from coronavirus disease (COVID-19). It is meant to give a practical overview of key recommendations for managing infectious human remains to practitioners, managers and planners, including decision-makers involved in the overall response to the COVID-19 pandemic. It complements existing guidance on managing the dead in situations requiring the advice and support of the International Committee of the Red Cross (ICRC).

The document is divided into two parts:

- 1 Management of the dead linked to COVID-19: Technical recommendations for health-care and death-care workers
- 2 Long-term response to increased deaths from COVID-19: Preparatory guidelines for a mass-fatality response plan.

The document is intended for those directly or indirectly involved in the management of the dead during the pandemic. Part 1 provides general guidance and support for the management of the dead. Part 2 provides general guidance and support to the authorities in their response to an increase in deaths during the pandemic.

The planning and implementation of activities around managing the dead should be always framed by the following fundamental principles, and COVID-19 is no exception:

- The safety and well-being of staff involved in managing the dead from COVID-19 should be the utmost priority. To this end, forensic best practices required for these activities should always be informed by the advice and latest recommendations for health personnel handling COVID-19 cases from national health authorities and international health organizations, especially the World Health Organization (WHO).
- The dignity of the deceased and their loved ones must be respected throughout the process. This is a humanitarian imperative that should guide the management of the dead in all circumstances.
- Every effort should be made to ensure the dead are reliably identified, failing which human remains must be properly documented and traceable to enable their future recovery and identification. This will help prevent the deceased from becoming missing persons.
- Measures for managing the dead need to recognize the interests and rights of families and communities and afford families utmost respect in accordance with their cultural and religious needs.
- The process for managing the dead from COVID-19 should not impede medicolegal investigations of deaths where required by the authorities (e.g. suspicious deaths or deaths in custody), but additional health and safety precautions should be adopted for the necessary post-mortem procedures.

In view of the rapid evolution of the COVID-19 pandemic, the novelty of the illness and the pace of new information emerging about the virus, its effects and how to control it, this document provides general recommendations and relevant references, which are based on evidence obtained so far and will be updated as necessary.

The measures required for effectively assisting in the management of large numbers of dead from COVID-19 will likely necessitate more human and material resources, including to build local capacity and support and/or carry out the recovery and identification processes.

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This guidance should be read in conjunction with the general guidance for managing dead bodies contained in *Management of Dead Bodies after Disasters: A Field Manual for First Responders* (ICRC, WHO, and International Federation of Red Cross and Red Crescent Societies (IFRC), 2016). The manual contains the general procedures to be followed when recovering and identifying the remains of people known or suspected to have died from COVID-19.¹ Additional references are included at the end of this document.

PART 1 MANAGEMENT OF THE DEAD LINKED TO COVID-19

TECHNICAL RECOMMENDATIONS FOR HEALTH-CARE AND DEATH-CARE WORKERS

This section provides guidance on the measures required for effectively managing the large numbers of dead from COVID-19. Such measures will likely necessitate increased human and material resources, including to build local capacity and support and/or carry out the recovery and identification processes.

IMPORTANT CONSIDERATIONS FOR COVID-19²

SARS-CoV-2, the virus which causes COVID-19, is classified as a hazard group 3 (HG 3) pathogen, like HIV and the tuberculosis bacterium. In some infected people it may cause a severe and acute respiratory syndrome which can be fatal, especially for the elderly. There is still no vaccine or effective cure for COVID-19, and treatment is symptomatic. Much is unknown about the virus. Current knowledge is largely based on what is known about similar coronaviruses. Coronaviruses are a large family of viruses that are common in many different species of animals. Rarely, animal coronaviruses can infect people and then spread from person to person, as was the case with Middle East respiratory syndrome (MERS) coronavirus, severe acute respiratory syndrome (SARS) coronavirus and now SARS-CoV-2.

The virus is known to spread mainly person-to-person:

- between people who are in close contact with one another (within about two meters, or six feet)
- through respiratory droplets or aerosols produced when an infected person coughs or sneezes
- from splashes of an infected person's bodily fluids.

Working in environments overcrowded with people who have SARS-CoV-2 (e.g. collecting the dead from an overcrowded detention facility) presents risks, but if properly used the personal protective equipment (PPE) recommended in this document will provide adequate protection.

It may be possible to get SARS-CoV-2 from contact with surfaces or objects contaminated with the virus by touching them and then touching your own mouth, nose or eyes.

The virus is normally known to survive a few hours outside the host, but this may extend to days in cold and damp conditions. The virus is easily neutralized with standard disinfectants, such as bleach and ethanol solutions.³

- ¹ Please note that annex 6 in the manual ("Dealing with the bodies of persons who died from an epidemic of infectious disease") was drafted for handling the dead from hazard group 4 (HG 4) pathogens such as Ebola virus – the most hazardous pathogens. Therefore, some of the guidance provided for in the annex is excessive for COVID-19, including recommendations on the personal protective equipment and disinfection procedures required as well as on the disposal of bodies. Pan American Health Organization, WHO, ICRC and IFRC, *Management of Dead Bodies after Disasters: A Field Manual for First Responders*, 2nd ed., Geneva, 2016, all web addresses accessed 7 May 2020.
- ² From: Centers for Disease Control and Prevention (CDC), *Collection and Submission of Postmortem Specimens from Deceased Persons with Known or Suspected COVID-19, March 2020 (Interim Guidance)*, CDC, Atlanta, 25 March 2020; M. Osborn et al., *Briefing on COVID-19: Autopsy Practices relating to Possible Cases of COVID-19*, The Royal College of Pathologists, London, February 2020.
- ³ See: G. Kampf et al., "Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents", *Journal of Hospital Infection*, Vol. 104, 6 February 2020, pp. 246–251, <https://doi.org/10.1016/j.jhin.2020.01.022>.



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Any post-mortem activities, including recovery, transport, autopsy, handover to families and burial, should be carried out with a focus on avoiding generating aerosols and splashing bodily fluids. If aerosol generation is likely (e.g. when using an oscillating saw, which is not recommended) appropriate engineering controls and PPE must be used, contaminated surfaces and equipment must be regularly disinfected, and thorough personal hygiene, especially hand-washing, must be rigorously observed. Employing these precautions in addition to standard precautions should prevent direct contact with infectious material, percutaneous injury and hazards related to moving heavy remains and handling embalming chemicals.

GENERAL PRINCIPLES FOR MANAGING HUMAN REMAINS INFECTED WITH SARS COV 2

- Any activity undertaken in relation to the management of known or suspected COVID-19 fatalities must be preceded by a preliminary evaluation and risk assessment. (See also Part 2 below)
- Staff responsible for recovering and identifying the remains of people who have, or may have, died from COVID-19 must be specifically trained in managing the dead and using PPE. Operations should be supervised by suitably qualified staff, at a minimum forensic professionals who are trained and experienced in managing the dead in challenging circumstances.
- The procedures adopted must limit staff's exposure to SARS-CoV-2, avoid to the extent possible further spreading SARS-CoV-2, allow for the timely and accurate recovery and identification of human remains, and respect the dignity of the dead at all times.
- Where potential conflicts arise between prevailing cultural practices and safeguards to prevent further exposure to and propagation of the virus, the safeguards must take precedent, and efforts should be made to ensure that this is understood, accepted and supported by the community, religious authorities and next of kin.

TECHNICAL RECOMMENDATIONS FOR BODY HANDLERS

"Body handler" refers to any individual involved in physically handling human remains. This includes, among others: health-care practitioners and health-care assistant personnel; and death-care workers, including forensic doctors, pathologists and other forensic experts, autopsy technicians, non-forensic personnel charged with recovering and transporting human remains, and individuals involved in preparing bodies for disposal, funerals or other commemorative events. Body handlers should take special precautions when handling the remains of individuals that have died from COVID-19, including the following:

- Use standard PPE:
 - Gloves – ensure that gloves are unpunctured; nitrile gloves are preferred.
 - Aprons/long-sleeved gowns/overalls to protect skin and clothing from contamination by infected material.
 - Eye protection – goggles/face shields.
 - Face masks – FFP2, FFP3 masks or N95 respirators are currently considered the best choice for preventing inhalation of aerosols and shielding the nose and mouth from splashes during the body-handling process. See the table below.
- Shoe protection is recommended.
- If there is a risk of cuts, puncture wounds or other injuries that break the skin, wear heavy-duty gloves over nitrile gloves.
- Use sturdy body bags (e.g. at least 250 microns thick, non-biodegradable and optimized against leaks), or double bag the body if the pouch/bag is thin and may leak. Extra care should be taken for cases of repeated manipulation over time during the earlier phases of the body handling.
- Disinfect any non-disposable equipment used while handling remains as per standard practice.
- Dispose of used PPE. Used PPE should be properly disposed of so as to avoid contact with people, food, drink, or eating and drinking utensils. Biohazardous waste incineration is best.
- Avoid contact with your face and mouth, as well as food, drink, or eating and drinking utensils, when handling bodies.
- Rigorously wash your hands after handling bodies and prior to eating or drinking.
- Do not engage in any other activity during the body-handling or preparation process.
- Following the body-handling or preparation process, rigorously wash your hands and disinfect any surfaces that may have come in contact with the infectious body.



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- Be aware of any hazards, in addition to SARS-CoV-2, which may be present in the environment and at the location of the body.
- Human remains with SARS-CoV-2 continue to pose a cross-contamination hazard for some time after they have been recovered (hours and possibly days).⁴
- The deceased's personal effects may also continue to pose a cross-contamination hazard. If they are to be returned to next of kin, carefully consider how best to decontaminate the items to avoid endangering the health of whoever receives them.
- Similarly, documentation created during the recovery, transport, examination, storage and burial processes may become contaminated with the virus and should be disinfected accordingly.
- The process of recovering and identifying infectious human remains will generate waste products which are also potentially contaminated. Carefully consider how to manage and dispose of waste so as to avoid compromising the safety of those involved and spreading SARS-CoV-2.
- Transport bodies to the mortuary (or the disinfection location, if no post-mortem examination will occur) as soon as possible.

TRANSMISSION-BASED PRECAUTIONS: PPE FOR THE CARE OF THE DECEASED DURING THE COVID-19 PANDEMIC⁵

	Low-risk procedures:*	Medium-risk procedures:**	High-risk procedures:
	<ul style="list-style-type: none"> • admitting deceased • preparing for viewing • releasing deceased 	<ul style="list-style-type: none"> • rolling deceased • undressing deceased • significant handling 	<ul style="list-style-type: none"> • autopsy • other invasive procedures
Disposable gloves	Yes	Yes	Yes
Disposable plastic apron	Yes	Yes	Yes
Disposable gown	No	No	Yes
Fluid-resistant (Type IIR) surgical mask	Yes	No	No
Filtering facepiece (FFP) respirator***	No	FFP2 or FFP3	FFP3
Disposable eye protection	Yes	Yes	Yes
Shoes / shoe protection (ideally boots that can be easily disinfected)	Yes	Yes	Yes

*If the procedure is likely to cause contact with droplets, use the protocol for medium-risk procedures.

**If the procedure is likely to generate aerosols, use the protocol for high-risk procedures.

***The [European Centre for Disease Prevention and Control](https://www.ecdc.europa.eu/en/eurosurveillance/volume-25-iss-1-2020) recommends the use of FFP3 masks for performing aerosol-generating procedures. In case of shortage of Class 3 respirators, the use of Class 2 respirators (i.e. FFP2) may be considered on a case-by-case basis and after assessing the risks of the procedures required.

4 G. Kampf *et al.*, "Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents", *Journal of Hospital Infection*, Vol. 104, 6 February 2020, pp. 246–251, <https://doi.org/10.1016/j.jhin.2020.01.022>."

5 Table adapted from: Department of Health and Social Care *et al.*, *COVID-19: Guidance for Infection Prevention and Control in Healthcare Settings*, GOV.UK, 27 April 2020.



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CONSIDERATIONS FOR POST-MORTEM EXAMINATIONS

Deaths known to be caused by COVID-19 are natural deaths and in general would not require a full post-mortem examination. However, examinations may be required in certain circumstances (e.g. for deaths in custody⁶) or when other causes of death are suspected (e.g. accident, suicide or homicide), regardless of whether the deceased had COVID-19. The decision to carry out a full or partial post-mortem examination is normally the responsibility of the authorities in the jurisdiction (e.g. coroners, prosecutors or judges), sometimes after discussions with investigators and forensic doctors.

For conducting autopsies, the following additional PPE is recommended: two pairs of surgical gloves with cut-proof synthetic mesh gloves in between, a fluid-resistant or impermeable gown, a water-proof apron, goggles or a face shield, and an FFP3 mask or a NIOSH-certified disposable respirator (N95 or higher). For further guidance, please refer to [Briefing on COVID-19: Autopsy Practices relating to Possible Cases of COVID-19](#).

SPECIAL CONSIDERATIONS FOR UNIDENTIFIED BODIES

The forensic procedures recommended by the ICRC for identifying the dead can be used for those who have died from COVID-19 where required. However, certain caveats apply:

- The remains of people who have died from COVID-19 may still be infectious and therefore hazardous to unprotected people, so visual identification by next of kin should be strictly controlled and follow the necessary precautions, including the use of PPE. Furthermore, because recovery operations may be complex and therefore take more time, remains may have decomposed beyond the point where visual identification is possible by the time they are recovered.
- All those involved in the examination and identification process of human remains known or believed to be infected with SARS-CoV-2 are required to wear appropriate PPE, which has an impact on the wearer's dexterity and their ability to use fine motor skills. In addition, performing invasive techniques may increase the risk of staff being exposed to the virus. For these reasons, invasive techniques should be avoided wherever possible.
- The extra safeguards required for handling infected remains may increase the time required for the identification and post-mortem processes as well as the physical burden on the staff undertaking them.
- Where remains must be identified (and examined post mortem), this should be done in a temporary holding area. This will help avoid overwhelming and contaminating normal mortuary facilities and endangering their staff, who will be expected to operate as usual.

SPECIAL CONSIDERATIONS FOR TEMPORARY HOLDING AREAS

The purpose of a temporary holding area is to serve as a place where recovered human remains with SARS-CoV-2 can be safely stored until arrangements can be made for their disposal.

Where recovered remains continue to pose a risk of cross-contamination, staff working in the temporary holding area (including those involved in the identification and post-mortem processes) must always wear appropriate PPE. Particular attention must be paid to contamination control within the temporary holding area. Depending on the type and persistency of the agent to which the remains have been exposed, some or all of the following measures may be necessary (to be adapted as our knowledge of COVID-19 evolves):

- Disinfecting body bags upon their arrival at the temporary holding area.
- Placing body bags containing remains inside second bags.
- Disinfecting the outer bag following the identification or post-mortem procedure.
- Wearing two layers of gloves (the outer pair being nitrile gloves). This should be done by all personnel when handling body bags or remains to reduce cross-contamination.
- Keeping records of all movement of human remains within the temporary holding area, and ensuring strict adherence to health and safety protocols at all times. There must also be a constant line of communication between the temporary holding area and the team coordinating the overall process.

⁶ ICRC, [Guidelines for Investigating Deaths in Custody](#), ICRC, Geneva, 2013.



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SPECIAL CONSIDERATIONS FOR DISPOSAL OF REMAINS / HANDOVER TO RELATIVES

- Where transportation of the body is required, the body bag containing the remains should be placed in a second body bag. (If the remains have already been double-bagged, the outer bag should be removed and replaced with a new bag.) The outer bag should be thoroughly disinfected prior to release of the remains.
- Cremation of unidentified human remains should be avoided; burial in single graves is the preferred method of disposal. However, care must be taken to ensure that run-off from grave sites with decomposing remains is managed so as not to contaminate ground water. Bodies should be buried in their respective body bags, regardless of whether coffins are used. This serves both to aid future recovery and examination of the remains if necessary (e.g. for identification) and to dispose of the body bags safely.
- For more information on this subject, please refer to annex 7 of [Management of Dead Bodies after Disasters: A Field Manual for First Responders](#).
- Personal belongings of those who have died from COVID-19 may present a cross-contamination hazard. Consideration should be given to decontaminating such items prior to handing them over to the next of kin in order to avoid the spread of contamination and associated health risks. When decontamination is not possible, careful consideration must be given to whether the items should be given to the next of kin or stored for later safe release. If it is decided to dispose of the items as contaminated waste, they should be documented along with the reason for their disposal.

CONSIDERATIONS FOR DISINFECTION PROCEDURES

- Disinfection procedures can be divided into two categories: procedures for staff responsible for managing the dead (along with their equipment), and those for human remains. The objectives of disinfection are to protect the health and safety of those handling the dead and to prevent the spread of contamination.
- The planning process should determine the most effective disinfection procedures, including processes for managing waste generated by decontamination.
- The recommended approach is to place human remains into two body bags at the site of recovery and to disinfect the outer bag.
- Disinfection of the body is not advisable, mainly because bodies may release the virus through aerosols or droplets from the respiratory system or other fluids). In addition, vigorous disinfection of bodies or body parts may destroy forensic evidence or obscure identifying marks and make identification more difficult.
- The disinfection of body bags should follow the standard procedures for COVID-19 and use recommended disinfectants.
- Disinfection procedures for staff should follow the method defined for the PPE they wear.
- Before any equipment is removed from the temporary holding area after disinfection is complete, care must be taken to ensure that it does not present a cross-contamination hazard.
- Any equipment which cannot be disinfected must be disposed of as infected waste, following standard biosecurity procedures. This usually requires controlled storage, transport and incineration.



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**PART 2
LONG-TERM RESPONSE TO INCREASED DEATHS
FROM COVID-19**

PREPARATORY GUIDELINES FOR A MASS-FATALITY RESPONSE PLAN

There is a high risk of a significant and rapid increase in fatalities overwhelming local capacities owing to the additional pressure placed on the health-care and medicolegal systems as well as on other service providers involved in the management of the dead. If many people are infected, it is possible that not all will receive medical attention, leading to undiagnosed deaths requiring medicolegal intervention. **This section provides guidance for decision makers and leaders of relevant institutions planning a response to a potential increase in deaths that would overwhelm normal capacities.** It should be read together with annexes 4 and 5 of *Management of Dead Bodies after Disasters: A Field Manual for First Responders*.

Below are essential elements that should be addressed by health ministries, justice ministries, interior ministries, foreign affairs ministries, cabinets, heads of government and, if they exist, disaster-management offices when implementing an existing mass-fatality response plan (as part of a national disaster-management plan) or in the absence of such a plan. If a crisis-management coordination centre exists, it should be engaged to coordinate the emergency response, including management of the dead. In the absence of a crisis-management coordination centre, or in case the centre has not incorporated management of the dead into its response, **a coordination group should be established with the main contacts from relevant institutions.** Medicolegal or forensic services experienced in managing the dead in emergencies, including infectious bodies, should be consulted for advice and included in the design and implementation of preparedness plans. This document focuses on circumstances specific to mass fatalities due to infectious diseases such as COVID-19, but most of the following recommendations should be part of an existing mass-fatality response plan.

In the absence of an existing plan, the following provides general guidance on the essential elements of a mass-fatality response plan. Concrete measures based on the steps in the process for managing the dead are also recommended to address the increased number of deaths quickly and with an integrated and comprehensive response.

ESSENTIAL ELEMENTS OF A MASS-FATALITY RESPONSE PLAN

- *Policy and practice should uphold the dignity of the dead and must demonstrate respect towards the deceased individuals and their families.*
 - *The death-management process should allow for operating under the pressure of many cases while maintaining the welfare of staff and affected communities.*
 - *The families of the deceased should be provided with relevant information. Ensure proper communication with the public.*
 - *Constant and effective communication and coordination between all agencies involved and other service providers is essential.*
- A national disaster-management plan should always include a mass-fatality response plan that has been drafted with the input of relevant authorities to carry out proper management of the dead, ensure the dignity of and respect for deceased individuals and their families, and undertake investigations where appropriate. The plan should be a framework for coordination that identifies key institutions and individuals and their roles and responsibilities. There should also be operational guidelines with specific actions that need to be carried out for legal inquiries or investigations into deaths.
 - The mass-fatality response plan should lay out a multi-agency communication and coordination strategy for all those involved in the response. This ensures that all parties understand their



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responsibilities and the agreed-on, standardized and complementary activities and practices that will respect the interests of all parties, including the public.

- The mass-fatality response plan should also lay out the criteria and mechanisms for implementing mass-fatality management. This includes the legislation on various authorities' responsibilities, the stages of the response and the command and control structure. The plan helps ensure that reporting lines are followed at all levels and by all those involved to carry out their respective responsibilities.
- Routine death inquiries or investigations should confirm the identity of the deceased and where, when, how and by what means they died. These investigations are carried out for all sudden, unexpected or unexplained deaths, including unexpected deaths from an outbreak of infectious disease such as COVID-19.
- Not all deaths from COVID-19 will occur in a medical facility. Therefore, proper training and supervision must be provided to first responders who may be faced with COVID-19 deaths to ensure safe management of the death scenes.
- Basic practices for managing the dead are essential and should be followed in all cases. They are particularly important when deaths increase sharply, placing stress on both human resources and facilities' capacities.
- The response must provide for giving adequate attention to the families of the deceased.
- A public communications and media strategy, carried out through designated communications centres and/or broadly accessible networks, should provide for regular, reliable and transparent communication to the public. The plans and operations of the various entities participating in the response should be relayed through regular updates and progress reports. Standard operating procedures must be established to ensure compliance with legislation on the protection of personal information.
- The mass-fatality response plan should not merely direct how bodies should be handled and/or disposed of. On the contrary, the plan should set out operational practices and the supporting financial, administrative and logistical systems that will ensure that all aspects of the death-management process are professional and dignified: search, recovery, examination, identification, storage and handover to families for burial. Each step should be documented in a standardized way; this documentation will contain important information that should be protected and centralized not only for the purposes of legal investigations and inquiries but also for planning, operations, logistics, administration and finance, and reporting. The plan should also specify policies and procedures for managing unclaimed and unidentified bodies and documenting their location and identifying features for future use. Each phase of the plan requires a thorough understanding of existing capacities and capabilities as well as identification of areas where solutions are needed.
- The mass-fatality response plan should describe occupational health and safety requirements that protect first responders and practitioners. It should lay out risk-assessment criteria and establish a mechanism for educating first responders about how to reduce their risk of infection during infectious-disease outbreaks. Equally, it should provide for training first responders, mortuary personnel, laboratory technicians and other individuals involved with handling human remains on contamination control, safety equipment and PPE. It should also emphasize the importance of relaying safety information to families and the communities where infectious bodies were recovered to reduce further contamination.
- Mass graves are **highly discouraged**. They are often a demonstration of poor planning by authorities, and they show a disregard for the wishes, customs and religious rites of families and communities. Single graves are respectful and dignified, and they facilitate locating human remains. This can only be accomplished, however, by collaborative planning between authorities, other relevant parties – such as funeral homes, crematoriums and cemeteries – and, most importantly, the families.
- Mass-fatality events often include the deaths of foreign nationals. It is important to follow internationally accepted best practices and procedures that promote the dignified and professional



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management of the dead, and to engage respectfully with people of different backgrounds, cultures and religions. This will aid in navigating the sometimes complex administrative and legal procedures of foreign governments when seeking to repatriate bodies or to notify relatives living abroad of a loved one's death. Shipment of bodies across international boundaries may be delayed until the infection is deemed no longer transmissible. Airline companies expected to ship bodies should be included in planning.

1 MANAGEMENT AND COORDINATION

- Identify the ministry or department leading the coordination of the government's response.
- Identify a contact at each of the agencies, including medicolegal and forensic services and other service providers responsible for managing the dead and interacting with their families, and clarify roles and responsibilities around the various phases of managing the dead, such as recovery and transport, post-mortem examination (if required), identification, storage and disposal or handover and burial of bodies, death registration and providing information and attention to families.
- Establish a coordination group with a multi-agency approach. It is important to include hospital administrators, religious authorities, municipal services, cemeteries and crematoriums for a truly integrated response. While not involved in the planning process, the private sector is a key resource and should be engaged to the extent possible under local regulations.
- Ensure a proper response is in place to cover all aspects of the process for managing the dead, including the needs of law-enforcement agencies where cases require investigation.
- Local authorities should ensure that any participating volunteers or private businesses follow the established procedures.
- It is important to have a good understanding of local capacities for managing the dead – mainly in relation to transport, storage and disposal of bodies – as a baseline for determining the next steps in the multi-agency approach.
- Ensure there is sufficient capacity in terms of infrastructure, human resources, materials and PPE to respond to the increase in deaths. If there is not, the coordination group should turn to alternatives for the required support.
- Ensure management or coordination staff at the various entities involved provide clear procedures and recommendations for handling bodies.
- Managing the dead, particularly transporting bodies, may pose additional health and safety issues to staff, such as the physical toll of handling bodies from repeatedly lifting large weights, prolonged exposure to cold temperatures and hazardous substances, and psychological trauma. Ensure that staff working under these conditions have their needs responded to and receive adequate support.
- Any activity undertaken in relation to managing known or suspected COVID-19 fatalities must be preceded by a preliminary evaluation and risk assessment. The evaluation should include a determination of the number, location and condition of bodies, including their COVID-19 status.

2 RECOVERY AND TRANSPORT OF THE DECEASED

In the event of increased deaths, moving bodies between homes, hospitals, mortuaries, cemeteries and body storage will require large numbers of staff for handling bodies and vehicles for transporting them. Make arrangements for transporting dead bodies with the following questions in mind:

- What legislation and regulations are in place, including around occupational health and safety?
- Who is responsible for transporting bodies?
- Do they have the necessary capacity?
- Are the police or judicial authorities involved?
- Where should bodies that are or may be positive for COVID-19 be transported? Is there a specific morgue or mortuary where they should be taken?
- At what point will the number of casualties exceed current capacities for transporting bodies? Identify the support required in terms of vehicles, infrastructure, materials and human resources.
- What alternative sources of support exist if current capacities are exhausted? Ensure they under-



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stand their role in the broader response.⁷ Do they know of and understand the required safety and precautionary measures?

- Will these alternative sources of support have the necessary insurance coverage?
- For recommended body-handling procedures, see “Technical recommendations for body handlers”, on p. 4.

3 DEATH CERTIFICATES AND DEATH REGISTRATION

- What regulations are in place? Is there any specific guidance or regulation to consider in a pandemic? For example, normally a physician certifies a death, but who certifies a death if there is no witness, such as when someone suspected to have COVID-19 dies at home? Is an autopsy mandatory?
- In the case of deaths in detention, what regulations must be followed? Consider working with law enforcement and other authorities to adapt in the case of a large increase in deaths.
- Who is responsible for issuing the death certificate and who is responsible for registering the death?
- Do they have the capacities necessary if deaths increase sharply? Are there measures in place to ensure, for example, there are enough doctors to sign death certificates and officials to register deaths? Bear in mind that government offices may not be working or may have reduced their activities, social distancing measures may be in place, etc.

4 POST-MORTEM EXAMINATIONS IN GENERAL AND WITHIN THE MEDICOLEGAL DEATH-INVESTIGATION SYSTEM (INFECTIOUS AND ROUTINE CASES)

- Review existing legislation around infectious diseases (e.g. for influenza).
- Local authorities should take measures to ensure that medicolegal services continue to be provided. A contingency plan should be established to properly carry out management of the dead, for both COVID-19 deaths and other fatalities, especially when the bodies are taken to the same facilities.
- Families of the deceased should be properly informed of any delays, the measures that have been taken, etc. Establish plans to communicate with families for both COVID-19 deaths and other fatalities.
- Consider how to use judicial and forensic resources efficiently to improve decision-making in cases that require medicolegal attention, what additional forensic resources could help in managing the dead from the pandemic, how to distribute cases, if possible, etc.

5 BODY STORAGE

- It is important to differentiate between body storage and temporary mortuaries. Each serves different purposes. Emergency body storage addresses the need for temporary storage space when a surge in deaths from emergencies exhausts existing storage capacity; temporary mortuaries address the need for additional medicolegal infrastructure (e.g. in emergencies) and include autopsy rooms and laboratories. A sudden increase in COVID-19 fatalities is likely to require additional body storage capacity and possibly also temporary mortuaries, depending on the circumstances and needs.
- Establish a mechanism to identify existing facilities suitable for body storage, coordinate procurement, staff the facilities and manage the storage of bodies.
- The coordination group should be informed of all existing body storage space. Existing facilities may be found at hospitals, public and private funeral homes, and forensics facilities. Consider military facilities as well.
- In some cases, universities may have additional body storage space. Some towns and cities may only have space at the public mortuary.
- Even if the decision is to bury bodies as soon as possible, bodies will undoubtedly remain in storage for a period of time while administrative and logistical requirements are satisfied (e.g. while awaiting issue of the death certificate, authorization for cremation or burial, ongoing

⁷ Alternative sources of support include funeral homes, private ambulances, first responders, civil defence, National Red Cross and Red Crescent Societies, police forces, military forces, commercial transport companies, short-term vehicle rental companies, sports venues, etc.



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investigations or notification of family). Additional storage space must therefore be identified in advanced.

- All phases of managing the dead, even when capacities are increased, may pose additional challenges during a pandemic, as handling potentially infectious bodies requires additional precautionary measures. In these cases, increased storage space provides a buffer, ensuring continuity in the other stages in the process.
- The minimum standards for setting up temporary storage facilities include requirements for a single-level facility or a building with suitable access for loading and unloading; secured premises; 24-hour access for vehicles; entrances, exits and windows obscured from media and the public; electricity and plumbing; adequate height for stacked shelves; space for identifying and viewing bodies; office space; staff amenities; and welfare facilities. Also consider features such as sealed concrete floors or flooring covered in non-slip waterproof rubber, easily cleaned surfaces and space for appropriate disposal of waste, as well as local regulations, environmental risk assessments, environmental permits, etc.
- Prepare a list of equipment needed for temporary body storage.
- When managing the dead, it is especially important in the storage and transport phases that bodies are identified and labelled with at least three identifiers, including one unique identifier (e.g. body number and date and place of recovery). Storage facilities must have a proper numbering system in place to ensure the correct bodies are released without unnecessary delay.
- Authorities involved must ensure their operating procedures follow the recommendations for handling infectious dead bodies. For the proper temperature for body storage, see [Management of Dead Bodies after Disasters: A Field Manual for First Responders](#).

6 VIEWING OF BODIES

A family viewing area should be provided. Because of social-distancing measures in place, it may be that only a few relatives will be permitted access to the facilities to complete the documentation required for burial. It is therefore also important to create an appropriate and comfortable waiting area for families in line with general recommendations for public spaces during the pandemic. At a minimum, facilities must include restrooms (with toilets and washbasins) adapted to the needs and religious beliefs of the bereaved and have trained professionals overseeing the viewings.

7 BODY DISPOSAL / BURIAL / CREMATION

- Personnel from funeral homes have expertise in handling and transporting the dead, though they usually have no legal obligation to respond to emergencies, and they can provide useful and timely support when other facilities are over capacity. They can aid in the process of registering deaths, getting burial permits, etc. They may also be able to offer suitable body-storage facilities at their funeral homes should the need arise.
- It is important to review the existing regulations on burial permits and cremation and ensure that the relevant authority issues a decree or instructions to speed the process for getting burial permits as much as possible.
- Cemeteries should follow recommendations for burying bodies in disasters. Consider issues such as the permit process and what land is available. Temporary burial of bodies may be necessary.
- For more information on this subject, please refer to annex 7 of [Management of Dead Bodies after Disasters: A Field Manual for First Responders](#).

8 REPATRIATING HUMAN REMAINS

In the case that human remains must be repatriated, is important to be aware of local regulations and procedures and of the authorities involved, such as consulates, border authorities and authorities in the receiving country. A coordination group should establish contact with the authorities responsible for issuing repatriation permits in both countries. Generally, a “free from infection” certificate is required, which is normally issued by a forensic practitioner or the attending physician. In the case of COVID-19, it is advisable to establish the procedures for repatriating human remains in advance in order to expedite the process and alleviate the burden for the families of the deceased in foreign countries.



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ANNEX

ESSENTIAL PRACTICAL QUESTIONS FOR THE RAPID ASSESSMENT OF EXISTING HEALTH AND MEDICOLEGAL SYSTEMS WHEN RESPONDING TO INCREASED DEATHS⁸

- Does a mass-fatality response plan or other guidance related to managing the dead exist that will direct a multi-agency response to an increase in deaths from COVID-19?
- Do you have the support of the health ministry, justice ministry, interior ministry, cabinet, head of government and disaster-management department to activate the existing mass-fatality response plan – as part of a national disaster-management plan – or to develop an emergency plan?

⁸ These questions may also be used to assess detention centres' responses in the case of a sudden increase in deaths in custody related to the pandemic.



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- What agencies would be called on to respond to a surge in deaths in a large-scale or protracted event, and which agency would take the lead in coordinating efforts to draw up a plan and implement it?
- What are the current capacities and capabilities of all agencies involved in the management of deaths?
- By what percentage can deaths increase before overwhelming agencies' current capacity and triggering the activation of the plan?
- Are current personnel adequately trained in safety precautions and equipped with appropriate PPE to handle a surge in infectious-disease cases? Are they insured against injury and death?
- Have arrangements been made with non-government groups and the private sector to secure additional support as well as to procure additional equipment?
- Does the plan insist on managing the deceased in a dignified and professional manner and respectfully engaging and complying with the wishes of the families and communities affected?
- Do the law-enforcement community and medicolegal practitioners have the additional resources necessary to ensure that all unexpected deaths are thoroughly investigated, even during an infectious-disease outbreak?
- Does the plan provide guidance on how to comply with legislation and regulations on protecting personal information?
- Will families, communities and the media be able to expect regular, reliable and transparent communication from competent sources who represent all the agencies and groups involved in the response? Where will they go to receive updates and status reports on the response?
- Who will recover the deceased from their homes, and what training and equipment will they receive to protect themselves and the bereaved families in an infectious-disease outbreak?
- What additional refrigerated storage space is available for a surge in deaths?
- What labelling and body-tracking methods will be used to effectively manage large numbers of bodies accumulating in mortuaries?
- Is there a standardized file-management process (including standardized forms) to ensure all facilities and agencies involved work coherently and collaboratively, using one system that allows all data related to the management of the dead to be centralized?
- How will information on caseloads be centralized to assist with further planning and targeted deployment of additional resources and equipment?
- Do cemeteries and/or cremation facilities have sufficient capacity to accommodate the increase in deaths in a timely manner?
- What will be the short- and long-term approaches to managing unclaimed and unidentified bodies?
- What administrative processes and additional support will ensure that families receive death certificates, burial permits, autopsy reports and other important documentation to resolve financial affairs, estates, etc.?
- Who will pay for the additional personnel, facilities and activities needed to respond to a protracted mass-fatality event?

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Annex 2: Guidance for safe community-led body handling and mourning ceremonies in the context of COVID-19

During COVID-19 outbreaks, all funerals and mourning gatherings, whatever the deceased's cause of death, should be modified to facilitate physical distancing, in order to prevent transmission of the virus between mourners.

Only personnel who have been trained and have the required materials should touch the body of someone who has died of COVID-19 to prepare it for burial, cremation or other final disposition. Relatives and cultural or religious leaders can prepare the body, with appropriate support and equipment.

The first priority of safe community management of the dead is to carry out the least intrusive, most culturally appropriate adapted body preparations and mourning ceremonies possible, while reducing the risk of transmission of the virus that causes COVID-19. National Societies, in their support to communities affected by COVID-19 outbreaks, should first support families and community and religious leaders to adapt their traditional body preparations and mourning ceremonies to allow them to proceed safely and respectfully.

Interventions such as Safe and Dignified Burials (SDB), which are carried out for Ebola or Marburg virus disease, are not necessary for COVID-19. In places where mortuary services are not standard or universally available, National Societies may be called upon to support families, religious and community leaders to safely prepare bodies of suspected COVID-19 cases for burial or cremation. These activities are much more limited in scope and scale than SDB programming, and should first and foremost focus on supporting those traditionally involved in body preparations and mourning ceremonies to continue to carry out their work safely. For guidance on direct involvement in burials, see “General guidance for the management of the dead: Protracted response to increased deaths from COVID-19 (A preparatory guideline for mass fatality response plan)” (Annex 1).

Guiding principles for safe community-led body handling and mourning ceremonies during COVID-19 outbreaks

Coordinate

- Coordinate and communicate with other actors supporting the response at all levels (national, district, provincial). Understand the 4 x W (Who? What? When? Where?)
- The lead organization responsible for supporting community-led COVID-19 body handling and mourning ceremonies should take particular care to liaise with actors involved in surveillance, risk communication and community engagement (RCCE), psychosocial support (PSS), diagnostics (laboratory), case management and infection prevention and control (IPC), as well as with other actors who are supporting management of the dead.

Protect providers and the community

- The potential for COVID-19 infection being transmitted by an infected person cannot be ignored when the body is manipulated in such a way that aerosols and/or droplets are generated, creating a risk for transmission of the virus.
- Handling the body of a person who is suspected or confirmed to have died of COVID-19 may carry some risk of transmission. However, it is not necessary to wear full PPE or to form specific SDB teams, as is the case for Ebola or Marburg virus disease outbreaks.
- To reduce the risk of transmission related to body preparations and funerals, it is necessary to support and equip family members, traditional and religious leaders and others typically involved in body preparations and mourning ceremonies at the community level to carry out their activities safely, including modifying body preparations to reduce the possibility of aerosol-generating procedures, and modifying traditional preparation and funeral practices to facilitate physical distancing.
- Pay attention to the well-being of those involved in body preparations. PSS should be available for all people supporting body preparations or mourning ceremonies.

Involve and engage the community

- To be successful, any strategy to adapt traditional body preparations and mourning ceremonies must be nested within a wider community engagement strategy because understanding the community and effective communication are vital for community acceptance and successful adaptation.
- Fear and distress, misinformation and misperceptions of COVID-19 and necessary epidemic control measures may cause members of a community to reject adaptations to traditional body preparations and mourning practices. To secure community consent, community engagement volunteers employ a community engagement strategy that includes talking with members of the community and explaining both the disease and measures necessary to prevent it. Community engagement volunteers can give families and community members objective information about adapted body preparations and physically distanced mourning ceremonies, listen to their fears and misperceptions about handling the dead, and respond to them.
- If body preparation educators understand what factors cause a community to resist or accept modifications to traditional practices, they will be in a better position to adapt traditional body preparations and funeral practices and apply these adaptations in ways that families and affected communities find acceptable.
- Regularly collect and analyse community feedback, including feedback on perceptions of adapted body preparations and funerals, to guide responses and service provision and encourage community engagement.

- Wherever possible, involve community and religious leaders, before, during and after any support to modified body preparations and funerals. National Society branches should work with local faith and traditional leaders, who can help to support families and perform substitution rituals if required.

At the time of the mourning ceremony and/or final disposition of the body

- Show compassion for those who are mourning. Make sure that people have an opportunity to grieve for the person who has died and honour his or her life. The deceased and the bereaved should always be respected.
- Family members should be allowed to participate in adapted mourning ceremonies, burials and cremations for suspected and confirmed COVID-19 cases, providing their participation can allow for physical distancing between the living.

Plan and set up COVID-19 activities to support community-led management of the dead

- Approaches to facilitate adapted body preparation and mourning ceremony procedures for COVID-19 should be incorporated in emergency preparedness and response plans for dealing with outbreaks of the disease.
- Preparedness and planning involve:
 - Determine who will provide the necessary advice, support and equipment to family members, traditional and religious leaders, or others who will carry out body preparations and lead adapted mourning ceremonies.
 - Determine who can provide PPE at the community level, and the supply chain to support it.
 - Determine where reusable PPE can be disinfected and warehoused for next use.
 - Engage communities and authorities to determine adaptations to the preparation of bodies and to funeral ceremonies that are safe and meet social, cultural and religious needs.
 - Determine whether there are any links between preparations and mourning for the dead and outbreak suppression measures such as contact tracing and testing. If so, how will information be shared between public health authorities and those involved in community-led body preparations?
 - Determine how many body handling educators or support teams are needed, based on population, demographics, and the size of the epidemic expected.
 - Establish a logistics pipeline and arrangements for storage or warehousing and stock management of required PPE. (Consider whether prepositioned stocks are available and whether additional local or international procurement is required.)
 - Ensure that reporting is undertaken to inform authorities of the actions that have been undertaken by the communities. This may require support from the National Society and include the numbers of body preparations undertaken per week as well as information as to who died, when and where they are buried or cremated.

Community engagement to support safe community-led body handling and mourning ceremonies

Aims

1. To make sure that families and communities fully understand, accept and support the modified body preparations before, during and after the body handling and mourning processes have been completed.
2. To make sure that the bereaved are considered, involved and respected throughout the adapted body preparations and mourning processes, and can raise their questions and concerns and see them addressed.
3. To alleviate confusion and fear of adapted body preparation and mourning practices.
4. To involve bereaved families and communities in the preparation and mourning of their loved ones.
5. To help communities deal with their loss, and reduce stigma, while helping family members and the community understand the risks of COVID-19.
6. To maintain a record of who died, when, and their burial/cremation information to report back to authorities and for health surveillance, administrative and vital statistics purposes.

Overview

- COVID-19 programming supporting safe community management of the dead can only be successful if it is embedded in a larger community engagement strategy.
- Engage with the community from the start of the COVID-19 outbreak. Doing so helps the community to understand and support necessary health interventions, including adaptations to normal body preparations and mourning rituals, use of PPE and disinfection.
- Involve community and religious leaders, before, during and after modified body preparations and mourning rituals take place.
- The deceased and those who are bereaved should always be respected. Show empathy for those who have lost a person they love. Assist people to mourn their loss and honour the lives of those who have died.
- Team members supporting adapted body preparations and mourning ceremonies should greet the family of the deceased and offer their condolences before they put on PPE or begin any modified body preparation procedures.
- Chlorine solutions for household disinfection, where appropriate, should be prepared in the presence of community members to dispel myths and fears about the disinfection process.
- Family members should be allowed to participate in the body preparation, mourning ceremonies and burial/cremation, adapted so that infection control is not compromised.
- Take steps to secure consent to adapted body preparation and burial/cremation procedures. Their rejection can lead to social discontent and aggression towards support teams and organizations that support safe COVID-19 body preparations and funeral practices.

Working with communities

Communities can be severely affected by COVID-19 outbreaks. At the individual level, people suffer grief at the illness and loss of their loved ones. The community suffers more generally from the stress and dislocation caused by widespread illness and loss of life. In addition, schools and businesses may close, and public activities cease. In many cases, there are economic consequences, and commodities may become unavailable or more expensive. Fear and distress, as well as misinformation and misperceptions of COVID-19 and measures to control them, may lead communities to reject adapted body preparations and funerals and other health interventions.

Community engagement volunteers play a vital role in explaining and adapting epidemic control measures to meet local needs. They provide objective information and help members of the community to understand the disease and the importance of preventive measures. Equally vital, they can gather community feedback on adapted body preparations and mourning practices, which helps support workers to avoid giving offence and adjust their services appropriately.

Staff and volunteers responsible for RCCE (sometimes called social mobilization) brief communities on COVID-19 and its symptoms, and advise people on what they can do to protect themselves and their communities. Their work includes information on modified body preparations and mourning ceremonies. The teams reach out to community members through radio, posters, adverts, face-to-face visits and community meetings. They should also collect information to increase their understanding of the community and its concerns and help the response to adapt services to local expectations. Teams supporting local adaptation and community-led safe body preparations, burials, cremations and mourning practices cannot work successfully without the community's support and acceptance.

Facilitating factors

Steps that can help communities to accept modified body preparations and funeral practices:

- While cloth masks should be worn to reduce the risk of transmission at all times, body preparation support workers should never arrive wearing full PPE. To avoid being alienated, the family and community members need to see “the person and not the PPE”. On arrival, members of any body preparation support team should greet and offer condolences to family members, then explain the purpose of PPE before donning it. Their explanations should match what community engagement volunteers have said.
- Talk with relatives and communities to understand what aspects of traditional body preparations and mourning practices can and cannot be amended. Listen carefully to family concerns and always show respect.
- Before starting any procedure, the precise arrangements for the adapted body preparations and mourning ceremonies should be discussed and agreed with the family and community to ensure they support and accept them. Simply telling families what the procedure requires may lead them to reject it.
- Explain to the family and community members what will occur after the body has been prepared for burial or cremation. (For example, if the deceased is suspected or confirmed to have had COVID-19, his or her contacts may be traced.) Make sure to leave a contact address of the body preparation support team in case the family has questions.

Addressing rumours and misinformation

Identify and counter inaccurate rumours about adapted body preparations and funerals. It is important to establish two-way communication with community leaders and community members, not least in order to learn about rumours, myths and misperceptions and the concerns and needs of the community. It is important not to dismiss misperceptions, and to counter them with clear and accurate information.

Coordination

As soon as a COVID-19 outbreak has been detected, it is essential to integrate all elements of the response, including COVID-specific procedures for body preparations and modified mourning practices, and coordinate surveillance, case management, RCCE and other pillars of the response through an established coordination structure and in close collaboration with the authorities.

National Red Cross Red Crescent Societies, supported by the IFRC, often play an important role in body preparations and burials or cremation during infectious disease outbreaks. This must come at the request for support by the authorities. In some cases, National Societies may be asked to take the lead role. In addition to supporting family and community members to safely carry out body preparations and adapt traditional mourning practices, this may require the National Society to chair and coordinate MotD pillar meetings, develop agreed MotD strategies, map the response, identify gaps, agree protocols and good practice, provide guidance, carry out advocacy and ensure that MotD activities are managed effectively. If asked to take a lead role in management of the dead, a National Society should consider these factors and their impact on its programming and human resources. Where ICRC is present in the country and supports forensic programming, ICRC can support the National Society with these activities and assessments.

Effective coordination

The agency responsible for coordinating adapted body preparations and mourning ceremonies should:

- ensure that sufficient body preparation and/or training teams are established to meet needs, and advocate for more resources if there are gaps
- organize regular MotD coordination meetings for all key actors
- ensure that RCCE activities describe body preparations and funeral modifications accurately and emphasize their potential role in interrupting disease transmission
- ensure that those who collect feedback from communities give attention to perceptions, rumours, myths and concerns about modified body preparations and funerals, and that feedback information is analysed and informs the content of public communications
- make sure that reporting is effective and that information management systems capture sufficient death and body disposition data accurately
- work closely with district authorities, and religious and community leaders, to identify burial grounds or crematoriums that can be used by all religious denominations
- report regularly on the team's response and provide information related to who died, when and where they are buried or cremated

Adapting funeral procedures and religious observances

In addition to changes to practices to prepare the body for burial or cremation, funeral services and other observances and mourning ceremonies may require adaptation in order to be carried out safely in the context of a COVID-19 outbreak at the community level.

- Family and friends may view the body after preparation for burial or cremation, in accordance with customs. They should not touch or kiss the body and should wash their hands thoroughly with soap and water following the viewing; physical distancing measures should be strictly applied (two metres between people, or as per local physical distancing guidelines).
- Although burials or cremations should take place in a timely manner, in accordance with local practices, if a ceremony is held, the number of participants should be limited. Participants should observe physical distancing at all times, plus respiratory etiquette and hand hygiene.
- People with respiratory symptoms should not participate in the viewing/funeral or at least wear a medical mask to prevent further transmission of the virus to others.

For communities in which physical interaction with the deceased (for example, kissing or touching the deceased) is traditionally part of funeral procedures, work with local community members, religious, cultural, traditional leaders and other relevant stakeholders to identify alternative methods - including symbolic representations of the traditional activity - that ensure that the social, cultural and religious needs of the deceased and their family and community can be met while maintaining the physical distance needed and not touching the body of the deceased once it has been prepared for burial or cremation.

Adapting standardized body handling and mourning guidelines to the local context

Take steps to become familiar with the demography of the population as well as religious practices and cultural beliefs that are relevant to the conduct of body preparations and funerals. To achieve this goal, the agency supporting community-led body preparations and mourning ceremonies should advocate for or carry out a rapid cultural assessment or knowledge, attitudes and practices (KAP) survey, especially in areas that have not experienced previous epidemics that have required adaptations to traditional funeral practices. Having acquired a clear picture of the situation, it should then adapt its body preparation and mourning ceremony support processes to local cultural traditions in consultation with communities and religious leaders (see Appendix 1). If anthropologists are available, their involvement in this process can be valuable (see Appendix 2).

Considerations:

- Use information gathered from previous census data or from KAP surveys to understand the community's cultural and religious beliefs and attitudes to modified body preparations and traditional mourning practices.
- Where KAP or cultural surveys are not available, community engagement volunteers can perform a rapid cultural or KAP survey. The baseline of information that is created can be used to adapt traditional funeral practices. Complement the information gathered by focus groups and individual discussions with key members of the community. (See Appendix 2)
- Faith leaders are permitted to perform ceremonies that involve direct contact with the body. In such cases, the individual should wear appropriate PPE and have been trained by the support team beforehand.

Scenarios and influencing factors

There are three general scenarios for supporting community-led body preparations and adapted mourning ceremonies, increasing in complexity and potential for community resistance. Before beginning any such support operation, an assessment should be made to identify the underlying body handling and mourning practices and epidemiological conditions, before selecting which of the three below scenarios will be chosen. The “lightest touch” possible should be employed, to reduce the impact on mourning families and communities.

1. Educate and equip traditional leaders, religious leaders and others who typically lead body preparation and funeral procedures

In communities where specific individuals - e.g. elders, cultural leaders, priests, imams or other religious leaders – are systematically involved in the preparation of bodies for burial or cremation, rapid training and engagement of these individuals can reduce risk of post-mortem and funeral-associated transmission without significant disruptions to traditional practices and without the intrusive presence of support teams during the family’s and community’s time of mourning. Traditional body handlers in this scenario will still require a consistent source of PPE at the community level, along with ongoing technical support and re-training to ensure that procedures continue to meet minimum IPC standards. The role of Red Cross Red Crescent branches and volunteers in this context would be to provide training, re-training, PPE where necessary, and risk communication and community engagement.

- Scenario 1: team composition
 - PPE store manager
 - Body handling educators/trainers (number depending on context)
 - Risk communication and community engagement

2. Educate, equip and supervise body preparations and mourning ceremonies led by family members or others traditionally involved in management of the dead (preparations for burial/cremation/body disposal)

If families typically prepare their loved ones’ bodies for burial or cremation by themselves, or with the support of a wide variety of intervenors, it may be necessary to provide direct support, equipment and supervision to families carrying out body preparations. In this scenario, support teams at the community level can demonstrate safe body preparation techniques and supervise family members to safely prepare the body for burial or cremation, and advise on physical distancing and other aspects of safe mourning ceremonies. The role of Red Cross Red Crescent branches and volunteers would be as in scenario 1, with the addition of a cadre of volunteers trained and prepared to directly supervise body preparations and, depending on need, funerals.

- Scenario 2: team composition
 - PPE store manager
 - Body management educators (number depends on expected deaths per day per National Society branch or community)
 - Risk communication and community engagement

In Scenario 2, trained body handling educators engage with and teach traditional and religious leaders and other body handlers to safely carry out body preparations and funeral ceremonies, and provide PPE from a centralized location. Body handling educators attend the body preparations to provide equipment and guidance/coaching, but do not directly participate in preparations (i.e. remain two metres away from the body).

3. Implement directly

In rare cases, support teams may directly prepare the body for burial or cremation, with traditional leaders or family members in attendance when they so desire. This is primarily relevant in contexts of mass fatality, or of death of unknown people, when other mortuary services are not available or are overwhelmed. In this scenario, the guidance on collection of information for future legal identification of the body by authorities and other legal matters, as well as traceability steps to maintain a knowledge of the whereabouts of the body and details on the burial/cremation site, should be followed as per the guidelines in *Management of Dead Bodies After Disasters: A field manual for first responders*. Please consult the section of this document on mass fatality management for guidance (Annex 1, Part 2) for implementation guidance.

- Scenario 3: team composition
 - PPE store manager
 - Dispatch and information management
 - Body management teams
 - Team lead/community engagement
 - Body handlers (two per team)
 - Drivers
 - Other possible roles, depending on context:
 - Morgue management

Many communities have a high degree of religious, social or cultural diversity, where body preparations and mourning practices and the people involved in preparation of the deceased may vary widely. In these cases, body handling and funeral support to reduce the risk of COVID-19 transmission may require a combination of Scenario 1 and Scenario 2 in order to ensure all families have access to the same level of protection and support. Programming supporting community-led safe body preparations and mourning ceremonies should consistently aim to provide the highest level of protection with the lowest possible level of intrusion. Organizations supporting these activities for COVID-19 cases at the community level may have an advocacy role to play with local authorities to ensure that body preparation and funeral procedures remain in line with guidelines and are not unnecessarily burdensome on families, communities or the supporting organizations .

Recruit and train body handling educators and support workers

Decide how many body handling educators and support workers need to be available to support the affected community and the anticipated number of deaths from suspected or confirmed COVID-19: recruit and/or train volunteers accordingly. The human resources required to support safe community-led body preparations and mourning ceremonies will depend on the programmatic approach taken as explained in the three scenarios above.

Considerations

- Consider the gender, religious and cultural mix of body preparation and mourning ceremony support workers to ensure they are culturally appropriate. It may also be necessary to evaluate the age and sex of these support team members. Some societies, for example, do not allow young people to perform funeral rites.
- Ensure all body preparation support workers are trained to carry out their scope of work and understand their roles and responsibilities.

- Ensure that all body preparation support workers have received training in RCCE and psychological first aid (PFA).
- Devote enough time and resources to training. Make sure that teams receive good quality training and coaching. Provide consistent refresher training and practice scenarios to ensure that Standard Operating Procedures (SOPs) are followed and teams maintain high performance standards.
- Ensure that support staff do not have any underlying pre-existing medical conditions or are at an age that would place them at increased risk of serious illness or death should they become infected (i.e. over 60 or as per the Ministry of Health's guidance on high-risk age categories).

Community-led preparation of bodies for burial or cremation

Before the body preparations/funeral

The family or community must respect and ensure that their family members respect certain measures:

- Wash hands with soap and water before and after participating in body preparations and funerals.
- Maintain physical distance of at least two metres between any people who do not live in the same household as each other.
- Without compromising the family and community's mourning needs, limit as much as reasonable the number of people in the funeral ceremony, with the maximum number in accordance with government guidelines on gatherings.
- Consider the use of cloth masks for all people attending body preparations and funerals, as a measure of source control to reduce the spread of the virus.
- People with respiratory symptoms or other symptoms of COVID-19 should not participate in funerals or other mass gatherings.

Preparing the body for burial or cremation

Identifying the body handlers

- The family identifies people who will assist directly in the preparation of the body. This can include traditional and religious leaders, family members and others per custom and religious, cultural or social needs.
- It is preferable that those already in close contact with the deceased, particularly those living in the same household with the deceased during their period of illness, be involved in the body preparation process, rather than family members not residing in the same household or having not already had close contact with the deceased while they were ill.
- Individuals at higher risk of serious COVID-19 infection and vulnerable populations - including people over 60 years of age and those with medical conditions such as heart or lung disease, diabetes or compromised immune systems - should not be directly involved in preparing the body for burial or cremation.
- Each person handling the body must be provided with PPE according to the PPE table, and should ideally be dressed in a front buttoned shirt that can be removed without pulling it over the head, or otherwise protected by a reusable gown or apron if splashes are possible.
- When the deceased has died in a health facility or isolation centre for COVID-19, the healthcare workers involved in their care should facilitate the body preparations to the point of handover to the family for burial or cremation. Healthcare workers should use PPE appropriate to the setting, at a minimum meeting the PPE recommendations set out for lay people here.

Prepare the body according to modified customs:

- Body handlers must avoid contact with their face and mouth, with food or drink, or with utensils for consuming solid or liquid food, while handling the body.
- Body handlers must avoid handling any personal effects (including mobile phones) until they have disinfected themselves and outside of the immediate area where the body is being handled or prepared for burial or cremation.
- Body handlers must not engage in any other activities during the handling or preparation process of the bodies.
- Be alert to any risk factors other than COVID-19 that may be present in the environment and at the body-preparation site.
- Any person preparing the deceased (e.g. washing, cleaning or dressing body, tidying hair, trimming nails or shaving) in a community setting should wear gloves and mask for any contact with the body (see PPE section).
- For any activity that may involve splashing of bodily fluids that could lead to fluid transfer (e.g. washing the body) or significant movements of the body, eye, nose and mouth protection (face shield or goggles and medical mask) should be worn.
- Avoid any contact between the face of the deceased and the face of the living. The person(s) preparing the body should not touch the face or kiss the deceased.
- Where possible, substitute rituals that involve washing the body, rolling or moving the body, or other significant manipulations of the body, with other culturally appropriate alternatives, including symbolic ones (see Appendix 2).
- Clothing worn while preparing the body should be immediately removed and washed after the procedure, or an apron or gown should be worn that covers the clothing.
- At no stage should there be any invasive procedures performed on the body.

Casketing or shrouding:

- If culturally appropriate, cover the body with a sheet before handling, turning or rolling it. Plastic or cloth sheeting can be used. A body bag can be used if culturally appropriate and available.
- Place the body in a coffin or shroud the body with caution.
- If a casket is used, clean the outside of the closed casket with a disinfectant (two per cent chlorine solution) or soapy water.

After body preparation:

- After handling a body of someone who has died of suspected or confirmed COVID-19 or after the preparation process is complete, disinfect surfaces that may have come into contact with the remains.
- Wash gloved hands with soap and water.
- Gently remove PPE and place reusable and disposable PPE in separate plastic bags for incineration or appropriate medical biohazard waste disposal.
- Remove clothing that has been used while handling the body and wash it in hot soapy water, or remove the gown that covered the clothing and place it with the reusable PPE to be disinfected.
- Repeat the process of thoroughly washing bare hands and arms with soap and water.
- Redress in regular clothing.
- Textile masks used by observers or on the deceased should be immersed in hot water and washed with detergent or soap, and dried in the sun. The deceased can also be buried or cremated without removing the mask, if this is culturally acceptable.

At the funeral:

- Prayers and ceremonies are permitted as long as the distance between people (two metres, or as per local health authorities' advice) is strictly respected by the family and community.
- Anyone with suspected or confirmed COVID-19 should remain in isolation, at home or in a health facility depending on local guidelines, and should not attend the funeral.
- Anyone with respiratory symptoms should stay home, or if their attendance is critical and their attendance is not contrary to local guidelines, wear a medical mask.
- People without symptoms are encouraged to wear a cloth face covering or cloth mask to protect others in the event they have been infected with the virus but their symptoms are not yet apparent.
- Handling of the body is forbidden once it has been prepared by the dedicated body handlers (e.g. do not touch, hold, kiss or wash the body).
- If a body is inside a casket that has been disinfected at the site of body preparation, no special PPE is required to carry it or place it in the grave, on a pyre or in another final resting place, although surgical gloves always offer additional protection.
- If a body has been shrouded and will be buried or cremated without a casket or body bag, surgical or waterproof rubber gloves should be used to place the body in the grave or on the funeral pyre.
- Families wishing to observe an open-casket funeral may continue to do so, so long as mourners do not touch the deceased.

Clean and disinfect the deceased's room and belongings:

- See WHO guidance² and disinfection section for details.

Burial or cremation sites

- People who have died of COVID-19 can and should be buried or cremated as per local customs and rituals, including in family plots and formalized graveyards or cemeteries. No special precautions are needed with regards to siting of the grave or graveyard.
- Traditional procedures for disposition of the body, whether through burial, cremation or other traditional methods, can all be accommodated with appropriate equipment and guidance on safe practices.
- Cremation is not necessary for infection control, and is not appropriate where it is not a traditional practice and/or if it is against the wishes of the family.
- Mass burials should not be performed specifically due to COVID-19.
- See also Annex 3 for guidance on preparing for long-term storage and disposal of bodies in response to increased deaths.

Personal protective equipment (PPE)

- The principles of PPE remain the same for all diseases, although requirements for different levels of PPE or barrier protection are determined based on the pathogen and level of risk of infection of the activities.
- PPE is specialized clothing and equipment that individuals wear to protect themselves against infectious materials or pathogens such as tuberculosis, the Ebola or HIV viruses. They form a barrier that prevents the infected body fluids of a deceased person from transmitting an infectious disease to uninfected persons during body handling and preparations.
- Only members of the body handling team or members of the community who handle the deceased need to wear PPE, except cloth face masks if recommended to be worn or out of preference.

² *Cleaning and disinfection of environmental surfaces in the context of COVID-19, 16 May 2020.* <https://www.who.int/publications/i/item/cleaning-and-disinfection-of-environmental-surfaces-in-the-context-of-covid-19>

- PPE should be put on and removed under close supervision and in accordance with SOPs for the disease in question.
- All items of PPE must be intact before use and must remain intact when put on or removed. Damaged PPE (e.g. gloves with holes) should be safely disposed of and replaced.
- Reusable PPE should be decontaminated and checked for holes, cracks and tears after every use. Items with holes, cracks or tears must be replaced.
- The purpose of PPE must be properly explained to members of the family of the deceased and to the community.
- PPE should be appropriately disposed of in accordance with the regulations surrounding the disposal of biomedical waste and hazardous materials. Used and contaminated PPE should never be left at the scene but rather collected properly and destroyed.

BE AWARE:

- The eyes, nose and mouth are the most vulnerable parts of the body. Make sure that masks and goggles, when necessary, fit correctly.
- Condensation can be a major problem when wearing goggles, if fitted improperly. It can impair the wearer’s vision and increases the risk of contamination (for example, if goggles are repositioned while handling a deceased person). Use anti-fog spray to prevent condensation. Anti-fog spray can be created by mixing a small amount of dishwashing liquid with water.
- A person who is unable to fit a mask or eye protection correctly must not carry out procedures for which this level of protection is required.

PPE composition

For family, religious leaders and others preparing the bodies of their loved ones (Scenarios 1 and 2), the following PPE is recommended. Last resort harm reduction approaches are only for use when there is no safer alternative, and should be carried out preferentially by people who have already faced likely exposure to the virus, such as those who have been caretakers of or have spent significant time in enclosed spaces with the deceased. As with all body handlers in the context of COVID-19, no one with a preexisting condition that makes them particularly vulnerable to a serious case of COVID-19, and no one over the age of 60, should directly handle the body.

PPE specifications and users for body preparations at the community level			
PPE item	Description	User	Last resort harm reduction approaches where recommended PPE is not available
Medical mask (disposable)	Fluid resistant medical or surgical mask. Can incorporate a filter or respirator, but not required.	Anyone directly handling the body where there is a risk of aerosols or splashes.	If medical masks are not available, both the deceased and anyone preparing the body should wear a cloth mask.
Goggles or face shield (reusable after disinfection)	Must fit comfortably and securely. Must be fog proof, or an anti-fog spray should be applied before goggles are donned. Must be decontaminated after each use.	Body handler carrying out procedures that could result in the deceased expelling air from the lungs (e.g. rolling the body)	If no goggles or face shields are available, avoid rolling, dressing or undressing the body, or other significant body manipulations. If these are unavoidable, place a mask on the deceased (cloth or medical) and wear a mask for the procedure.

Gloves (medical or reusable heavy duty rubber)	Nitrile or latex glove, OR rubber gloves, resistant to water and penetration. Only a single pair of gloves is required.	Anyone who will directly touch the body of the deceased	When gloves are not available, body handlers should observe strict hand hygiene - wash hands thoroughly with soap and water (20 seconds or more) before, during and immediately after touching the body. Ensure no body handler touches their face during the body preparations.
Reusable gown or apron	A wraparound gown used to cover clean working clothes (shirt and trousers) when carrying out aseptic medical or surgical activities. See preferred standards here.	Anyone directly handling the body when splashing is expected, such as when washing the body.	If aprons or gowns are not available, change clothing once the body is secured, and wear a front buttoned shirt that can be removed without pulling over the wearer's head and face. A large-size garbage bag or plastic sheeting can be used, with neck and arm holes cut, to protect the wearer when necessary.
Non-medical face mask (e.g. cloth mask)	See preferred standards here.	Anyone who will be in the room observing the preparations, but not within two metres of the deceased.	

As bodies can expel air from the lungs due to bodily manipulations, there is a small risk that such manipulations could lead to the generation of aerosols and/or droplets, creating a risk for transmission of the virus. Aerosol-generating manipulations should be avoided as much as is culturally possible, but where necessary, a cloth or medical mask should be placed to cover the deceased's mouth and nose for the following body preparations:

- Rolling the deceased
- Undressing or dressing the deceased
- Other significant handling of the body

Any invasive procedure involving placement of items inside the body or removal of material from inside the body should be substituted with other culturally acceptable alternatives. See Annexes 1 and 2 for suggested ways to identify these high-risk procedures and their alternatives.

Waste management

All infectious waste products in the environment of a person who has died from suspected or confirmed COVID-19, and waste generated during the body preparations, need to be disposed of in a safe and responsible manner. Every effort must be made to minimize risks to the community and to those who handle the waste. Used single-use PPE should be incinerated and reusable PPE properly decontaminated. Contaminated reusable PPE should be double bagged for transportation.

In the community or at the final resting site (e.g. graveyard or crematorium), an incineration hole may be dug and used to dispose of waste. Burn used, decontaminated and bagged PPE and all waste collected from the house of the deceased. Alternatively, used PPE can be burnt responsibly and safely at a distance from structures, or taken back to the operational base or a health facility for incineration. (Note. The facility in question must consent to such action in advance³.) Cleaning of reusable PPE should be conducted in accordance with manufacturers' instructions for all cleaning and disinfection products (e.g. concentration, application method and contact time, etc.).

³ Always make sure that any fire created for incineration of waste material is fully extinguished before leaving the location.

Cleaning the deceased's home

When an ill person expels viral particles -- through coughing for example -- they can remain active on surfaces for several days⁴. As such, it is important that places where people who have died of COVID-19 (suspected or confirmed) be cleaned and disinfected to reduce the risk to other people in the household. If the person has died in a health facility or isolation ward, health personnel are responsible for cleaning. When people die at home, National Societies can help to support families by supporting decontamination and cleaning of the places where the deceased stayed while they were ill.

- Disinfect and decontaminate all household items used by the deceased in the days immediately before his or her death. Use 0.1 per cent chlorine solution on any surfaces, and 0.5 per cent solution on any large spills of bodily fluids⁵.
- The potential presence of SARS-CoV-2 in human remains poses a potential risk of cross-contamination for a period of time (hours or even days) after their transport from the site of death.
- The belongings of the deceased person do not need to be burned or otherwise disposed of. However, they should be handled with gloves and cleaned with a detergent followed by disinfection with a solution of at least 70 per cent ethanol or 0.1 per cent (1,000 ppm) bleach
- Clothing and other fabric belonging to the deceased should be machine washed with warm water at 60–90°C (140–194°F) and laundry detergent. If machine washing is not possible, linens can be soaked in hot water and soap in a large drum using a stick to stir and being careful to avoid splashing. The drum should then be emptied away from clean water sources, and the linens soaked in 0.05 per cent chlorine for approximately 30 minutes. Finally, the laundry should be rinsed with clean water and the linens allowed to dry fully in sunlight.
- Family members or body handlers designated to clean the deceased's room and toilet must wear gloves, goggles and masks and preferably a gown to protect clean clothing.
- Wash the room with soap and water or a disinfectant (chlorine solution), as well as the doorknobs, bedside table and other equipment in the room, and the toilet and WC.
- The bedding (sheets, blanket, towels...) should be put in hot water and washed with soap by a family member or body handler. The latter must wear examination gloves to gather the bedding and wash his/her hands with soap and water after the activity. Clean linens should be dried in the sun.
- All persons involved in cleaning must wash their hands with soap and water after the activity.

⁴ G. Kampf et al., "Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents", *Journal of Hospital Infection*, Vol. 104, 6 February 2020, pp. 246–251, <https://doi.org/10.1016/j.jhin.2020.01.02>

⁵ Please refer to the WHO guidelines on cleaning and disinfection of environmental surfaces in the context of COVID-19 for specifications on concentrations and applications for different contexts: <https://www.who.int/publications-detail/cleaning-and-disinfection-of-environmental-surfaces-in-the-context-of-covid-19>

Appendix 1. Survey processes for appropriate body preparation substitution rituals

Survey process to identify substitution rituals for SOPs, incorporating rapid cultural assessments, KAP and lessons learnt.

1. DESK STUDY	
1.1 Analyse basic demographic, social, religious and cultural data	Identify key characteristics, population numbers, ethnicities, cultural practices, different religions practised and their locations, age, sex, literacy rates, access to information, channels the community uses and trusts.
1.2 Literature review of available research	Identify previous outbreaks, resources available for managing the dead, relevant bylaws, previous cultural/KAP surveys performed in the area.
2. CONSULTATION	
2.1 Identify potential stakeholders	Information on body preparations and funeral procedures should be sought from a range of people in different communities, including faith and community leaders, women, agents of change, elders, traditional healers and local authorities (see Appendix 2). Find replacement rituals or procedures that comply with religious and cultural practice but do not breach infection controls. These can be used when traditional funeral procedures cannot be performed.
2.2 Contact and consult stakeholders	Plan your consultation carefully. Consider religious and cultural sensitivities, community hierarchies, the community's fears and concerns, and rumours.
3. DOCUMENTATION	
3.1 Describe the purpose of a rapid cultural or KAP survey	Tell stakeholders that the aim is to understand local funeral practices, religious beliefs and local community structures, in order to take account of these when substitution rituals are adopted as part of a control and containment strategy during outbreaks.
3.2 List and describe key cultural practices of the community	Ask stakeholders to describe the values they attach to cultural practices during funerals and deaths (for example, marriage and lineage rights). Ask which practices may be incorporated in substitution rituals and which should be deferred until the outbreak has ended. Be aware that cultural values and practices may vary from one community to another within the same outbreak area.
3.3 Summarize key findings	Summarize. Which values are important? Have substitution rituals been adopted in the past? If they have not, what substitution rituals will be acceptable?
3.4 List and describe key religious practices in the communities	Ask stakeholders to describe the values they attach to body preparations and funeral practices. Ask which substituted practices are acceptable to the community, and which are not.
3.5 Summarize key findings	Summarize. If certain religious practices during funerals were substituted in the past, were these substitutions acceptable? If not, what rituals or practices would be more acceptable to the community?
3.6 Copy supporting documents	Make copies of relevant documents, recordings, videos, etc.
4. ACTION	
4.1 Recommend substitution rituals that will be acceptable during the outbreak	Document your findings. Where the community has experienced outbreaks of infectious diseases requiring adapted body preparations or funeral practices in the past, suggest how substitution rituals and adapted body preparations and funerals can be improved. What lessons can be drawn? Where there has not been an outbreak in the past, propose substitution rituals that you believe the community will find acceptable.
4.2 Revert to traditional body preparation and mourning rituals once the outbreak is officially declared over	Collect together the information that has been assembled on previous outbreaks that required adapted body preparations and mourning ceremonies (e.g. cholera, Ebola, Marburg), lessons learnt, how the dead were buried, how the dead were reported/referred for body handling support, SOPs and guidelines.

Appendix 2. Local body preparation and mourning practices: open-ended questions⁶

Introduction [to be read aloud to the respondent].

“ *I would like to discuss a sensitive topic with you. It is important for us to understand the situation here in [location of outbreak]. Remember, your answers are confidential and there are no good or bad answers. If you do not wish to answer any of these questions, that is completely fine. If you would like to pause or take a break at any time, please let me know. Thank you for your help and for answering these questions.* **”**

Question

1. When a person dies, who is notified of the death? Who needs to be informed first?
2. Who confirms the death (paramedic, doctor, medical officer)?
3. Do law enforcement authorities need to be called to investigate the death? How much time passes between a death and a burial/cremation or funeral?
4. Where is the body kept before being prepared for the funeral?
(Prompt: at home, at a funeral home, in a hospital or health centre.)
5. How is the body prepared for burial/cremation or the funeral? Who prepares the body?
(Prompt: washing, dressing, decorating, spraying perfume, touching.)
6. What happens during a normal burial/cremation or funeral process?
(Prompt: what happens before, during and after the body is laid to rest?)
7. Who attends the burial/cremation or funeral? How is the body handled during the burial/cremation or funeral process?
8. Who handles the body?
(Prompt: include physical contact; ask about relationships to the deceased.)
9. Would it be acceptable to carry out COVID-19 sampling [currently naso-pharyngeal swab] on a deceased person?
10. What, if anything, is the body buried in?
(Prompt: coffin, shroud, leaves, remains of the hut of the deceased.)
11. Are burials/cremations or funerals different for different people? If so, how?
(Prompt: men/women, children, people of social standing, different ethnic or religious groups, pregnant women.)
12. Where are people usually buried? Why?
(Prompt: the person's place of origin or home town, even if it is a different village or town.)
13. If a person's body needs to be moved elsewhere for burial/cremation, how is it moved?
(Prompt: when, by whom, what mode of transport, what happens along the way?)
14. Separate to the burial/cremation or funeral itself, is it important to hold mourning rites or practices? What are they? Who must follow them? How long do they last?
(Prompt: include physical contact.)
15. What happens to the possessions of the deceased?

16. Are any cultural or sentimental items put into the coffin to be buried with the deceased?
17. Is food shared among people at the burial/cremation or funeral?
18. Do friends and family have physical contact with the deceased during the burial/cremation or funeral?
19. Do friends and family have physical contact with each other during the burial/cremation or funeral?
(Prompt: hug, shake hands, kiss.)
20. What are the consequences if burial/cremation or funeral practices are not correctly followed?
(Prompt: spiritual, social, economic, legal, land-related consequences.)
21. In certain cases, is it acceptable to alter or suspend normal burial/cremation or funeral practices?
(Prompt: if so, in what situations, how are practices changed?)
22. Are you aware of adapted body preparation procedures for COVID-19? If yes, what do you know about these adapted preparations? What do you think or know happens during such a burial/cremation? (If the respondent does not know what an adapted body preparation for COVID-19 is, explain.)
23. Is this kind of burial acceptable to you or your community during an Ebola/Marburg outbreak? Why or why not?
24. If normal burial practices need to be altered or suspended for some reason, how should this be decided or negotiated? Who should be involved in the decision?
25. In your view, what can be changed to make a safe body preparation/ burial/ cremation/ funeral acceptable or more acceptable to you or your community? (Prompt: who should be involved? What is each person's role?)
26. What is your ethnicity, tribe, or religion?
27. Do you feel that other members of your community have similar body preparations and mourning rites?
28. Who reports the deaths to the authorities so that they are aware of the Covid-19 outbreak and can assist in measures to reduce the spread of the infection?
29. Are trench graves permissible if the number of deaths becomes too high for individual graves?
30. Would you like to share any other comments you have? Do you have any questions?

Thank the respondent for his or her time and participation.

Annex 3: A Quick Guide on How to Prepare Long-term Storage and Disposal of Bodies in Response to Increased Deaths (Interim Guidance)

International Committee of the Red Cross

PROTECTION, DIGNITY AND RESPECT FOR DECEASED INDIVIDUALS AND THEIR FAMILIES IN RELATION TO COVID-19: A Quick Guide on How to Prepare Long-term Storage and Disposal of Bodies in Response to Increased Deaths

ICRC Forensic and WatHab Units

BACKGROUND INFORMATION (Not to be included in the guidance)

The number of COVID-19 cases is increasing while several countries enforce restrictive measures to restrain the spread of the virus. COVID-19 has hit several countries already affected by several humanitarian crises. COVID-19 may have a significant impact on certain groups of people such as detainees, migrants, refugees and internally displaced people (IDPs), who are often among the most vulnerable in a given community. The widespread political unrest across some regions and economic crises are factors that make the response to this pandemic even more challenging. While the death toll in the Middle East, Africa and Latin America is still less than the one seen in some European countries and the United States, it is important to consider the possible impact of COVID-19 and the resulting deaths increasing. The ICRC has initiated and offered technical support to authorities in the establishment and implementation of mass fatality plans. However, unfortunately, most contexts still do not have adequate plans in place to respond to mass fatalities issues, including adequate storage / disposal and burial of the deceased.

States' reluctance to implement a strategy for mass fatality response will undoubtedly be responsible for mismanagement of the dead, including lack of respect and protection towards the deceased and their families, misidentifications and bodies misplaced or missing. Increased missing persons cases, and non-compliance with recommended safety practices are also consequences of the mismanagement of the dead. This has a ripple effect leading to increased contamination of responders and their families as well as causing unnecessary community fears about the dead spreading the disease that will prompt authorities to approve disorganized and undignified mass burials. The mismanagement of the dead and lack of protection will also greatly affect families which can be left with no news and not knowing what has happened to their relatives, where they are buried and with no chances of holding proper funerals according traditional, cultural or religious practices, even at a later stage when the situation allows it.

INTRODUCTION

Proper burial (temporary burial if required) and documentation of the deceased are part of the Management of the Dead process¹. Policy towards the protection of the dead and their families, plus adequate regulations and standard burial technical and administrative procedures are essential to ensure dignified burial or any other form of disposal of bodies in routine medico legal and death investigations,

¹ Refer to "[Management of Dead Bodies after Disaster: A Field Manual for First Responders](#)", Revised and Updated 2^o Edition (2016), ICRC, IFRC, PAHO and WHO, p 27-28 and Annex 7 for further details.

but also after a mass fatality incident or an event that causes a surge in deaths over time. . Authorities and personnel responsible for cemeteries or burial places are normally involved in the following aspects:

1. Burial and documentation
2. Maintenance of burial places
3. Exhumations and transfer of bodies

The present quick guidance aims at providing practical considerations and recommendations to address the process of burial (including temporary burial) and documentation with focus in Covid-19 Pandemic.². Considerations for bullet points 2 and 3 will not be considered in the present document. It is important to note, however, that this guidance applies for any mass fatality incident, such as a pandemic, when the local capacities to ensure safe, adequate and dignified burial are overwhelmed.³.

In addition to this guidance and based on its experience gained worldwide from the management of the dead in emergencies, including epidemics, the Movement has therefore prepared a set of recommendations. These includes advice on the handling of COVID-19 fatalities and a set of considerations for authorities and managers faced with the need to plan and respond adequately to a possible surge in fatalities caused by COVID-19. These recommendations, which are now publicly available in various languages, also include special considerations in relation to temporary storage areas, for final disposal of bodies and/or handover to families. Key aspects in relation to the essential link to the next of kin and required documentation and registration of death are also emphasized.

In the following chapters, several general recommendations will be discussed to ensure proper management of the bodies. The document will cover the planning stage, the location and design of the Cemetery including, size, excavation and other considerations to bear in mind. The document does not only discuss the specifications of the cemetery itself but also discusses the proper procedures while receiving the bodies and also the measures taken to ensure the safety of the families and workers. Following these measures, additional points on proper Mapping of the graves is detailed, in addition to some recommendations on some of the actions that should be avoided to ensure the traceability and proper management of the bodies in the cemetery.

MAIN PRINCIPLES

- ✓ 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 and training
- ✓ All measures taken, including policies, regulations and practice must ensure the protection and dignity of deceased individuals, and demonstrate respect towards their families and affected communities, including special considerations for their cultural and religious rituals.
- ✓ 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.

² There is no scientific reason why bodies infected with Covid-19 cannot be buried safely in existing community cemeteries. There is no reason for these cases to be buried in separate cemeteries as their families should be afforded the right to visit their relative's grave like anybody else in the community.

³ Local authorities may have very limited resources to absorb a surge in deaths so it's important to consider that local capacities may be quickly overwhelmed with merely a handful of cases due to lack of storage or trained resources.

OBJECTIVES

Appropriate burial and proper documentation of cemeteries is important for the following reasons:

1. Ensures that all bodies are traceable and accounted for. This becomes more relevant in mass fatality incidents and especially for bodies not identified and / or unclaimed⁴.
2. Facilitates, if, and when required proper medico legal investigation of death and identification of bodies.
3. Allows families and relatives to mourn and access the burial location of their relative.
4. Ensures the safe disposal of bodies by prioritizing, health and safety measures and precautions for workers and communities.

GENERAL CONSIDERATIONS

- Caring for the deceased varies according to local, cultural and religious practices. Therefore, it is recommended to consult with relevant stakeholders, particularly religious representatives, community leaders to ensure that changes to standard practice are acceptable. Transparent conversation with such leaders is likely to be essential to sustain trust between authorities and the community, for which a communication strategy within the emergency response plan is recommended.
- All bodies, including the unidentified and unclaimed, stored in temporary facilities or buried must be tracked and be accounted for.
- All burials should be registered, and the graves physically identified with a reference marker specific to each body.
- Care must be taken to ensure that run-off from the decomposing human remains is managed so as not to contaminate ground water. Cemeteries should be respectfully maintained and protected.
- Dealing with the bodies of migrants or any foreigners should include provision for their repatriation to their home country. This is done in consultation with the embassies and consulates, immigration and border control departments, health authorities, civil aviation authorities and airlines, funeral homes, and other relevant government Departments. In view of the currently enforced restrictive measures, and countries closing their borders to prevent the spread of COVID-19, the Department of Foreign Affairs or Governor's Offices should be consulted on arrangements for returning those who died as a result of the infection, or other causes, to their countries of origin. This will require permissions and instructions for receiving these bodies by their countries of origin with provisions for handling the deceased once they have been received. The reasonable needs of the families must be respected at all times so long as safety can be maintained, and they should be informed of any decision that both the country of residence and the country of origin take. In cases where authorities decide to temporarily bury the bodies, burials must be arranged according to the rites of the religion to which the deceased belong to.

⁴ In certain contexts, the deceased often belong to vulnerable communities living in shelters or on the street. They may be a migrant, displaced person, refugee or a person separated from their family (including persons deprived of freedom) which prevents their relatives from assisting in identification or immediately claiming their body, therefore adequate storage / burial is imperative.

- In cases of refugees and IDPs camps, authorities are encouraged to establish a cemetery adjacent to the camp, if possible, to enable the process of mourning and prevent disappearances.

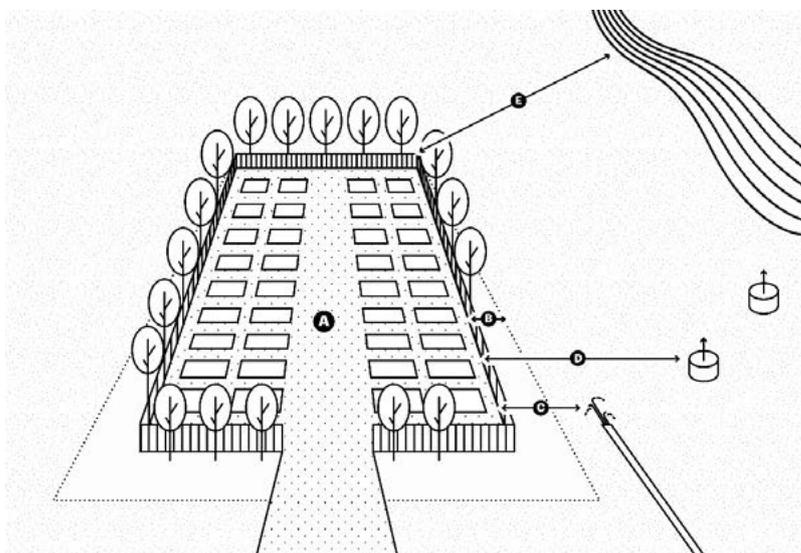
PLANNING

- Review the existing regulations for burial permits and ensure that the relevant authority issues a decree or instructions to facilitate the burial permits in case of mass fatalities or when the capacities for burial are overwhelmed. Issues such as permits, and land availability must be considered ensuring whether the site is considered for temporary or permanent burial of bodies.
- Identify key actors, other organizations or companies that might be involved in the process or contribute to it (i.e. Funeral services, Crematoriums, Private and Public cemeteries)
- Mass graves are not recommended, nor in keeping with International Best Practices on the dignified management of the dead. They are often a demonstration of poor planning and shows a disregard for the wishes, cultural/religious rites of families and communities. Individual graves are respectful and dignified. They facilitate the traceability of human remains.
- In exceptional circumstances, the use of trench burial (a trench holding a single row of labelled bodies, each placed parallel to the other) may be necessary and is acceptable if properly documented and managed, and the justification for this burial method communicated to the families and communities affected.
- In cases of infected bodies (like in COVID19), bodies should be buried in their respective body bags, regardless of the use of coffins. This will help in their future recovery and examination if necessary (e.g. identification) as well as taking care of the disposal of the body bags. When coffins are used, they should be made from materials that degrade rapidly and do not release persistent chemical by-products into the environment. Bodies with or without coffins should not be stacked one on top of the other.

LOCATION AND DESIGN

- The piece of land chosen should be free draining and not prone to flooding. Slopes and hills can be subjected to landslides and may be more difficult to develop. A geological and hydrological opinion should be sought in any case prior to the opening of a new cemetery. Through it, some of the minimum distances given in this chapter may have to be increased.
- The need for additional cemetery land must be evaluated ahead of time based on existing cemetery burial space calculations. If it is expected that the cemetery will not have sufficient space to accommodate a sudden influx of burials, alternate cemeteries or land that municipalities can designate as cemeteries must be planned for before the influx is experienced and to avoid conflict with communities.
- Additionally, planning for cemetery operations must take into consideration the funerals being conducted on a more-than-regular basis. Therefore, there is a need to accommodate the various logistical aspects of cemetery management to adequately coordinate work and traffic flow in relation to meeting the increased demands for safe and respectful funerals. This may require careful considerations of access to and from certain areas, such as management of entrances and coordinated control over the roadways within the cemetery.
- **Distance from water sources:** Contamination of water may occur from buried human remains through microorganisms (present in the bodies at death) washing out into drinking water. Therefore, the distance from water sources shall be taken into consideration. The proliferation of

these microorganisms that can then leech out in body fluids into the surrounding soil and water are not as a consequence of Covid-19 infection but rather related to a process in the body that occurs after all deaths. This principle should always be remembered when determining safe distances between cemeteries and a community's water sources.



- A = Cemetery = Burial site + circulation space
- B = Buffer zone allowing the planting of deep-rooted vegetation and to separate the burial site from inhabited areas = 10 m minimum
- C⁵ = Distance between burial site and field drains = 10 m minimum
- D = Distance between burial site and drinking wells, boreholes and wells = 250 m minimum
- E = Distance between burial site and springs and water courses = 30 m minimum

- **Rough surface**, as a reference.

Number of graves ⁶	Surface area (A) in m ²
10	75–200
100	570–1,750
150	900–2,600
300	1,550–5,100

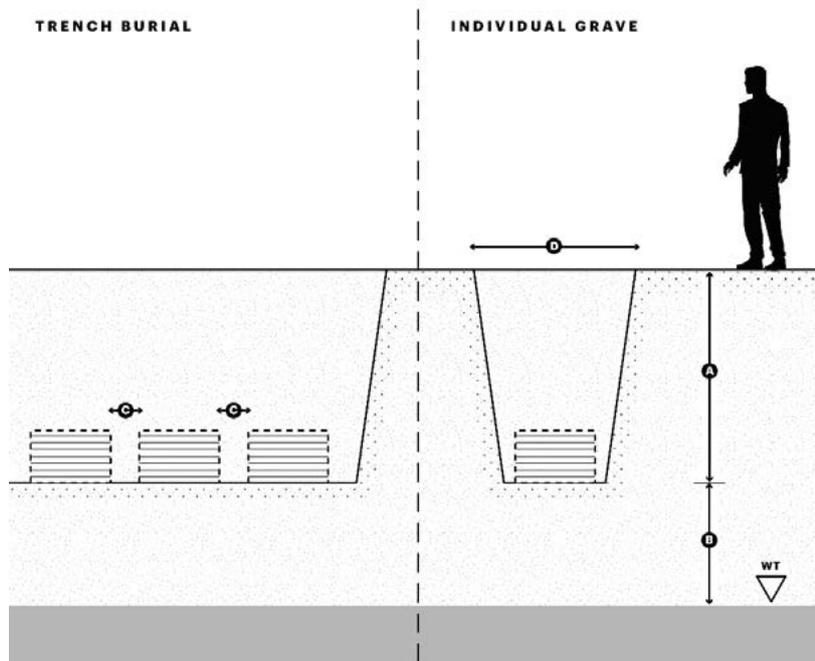
⁵ The minimum distances given for C, D and E may have to be increased according to soil conditions.

⁶ These indicative figures were calculated based on a rectangular plot with a) trench burials with 1.5 m between the trenches (scenario 1, smaller surface area) and b) individual graves size of 2.5 m x 1.2 m, with 2 m between them (scenario 2, greater surface area). Some space for circulating has been included.

- Cemeteries need to be accurately mapped and the graves visibly demarcated.

Excavation

Proper excavation prevents scavenger access and water contamination, preserves evidence for possible future identification and, ultimately, allows dignity.



A⁷ = Depth = 1.5 – 3.0 m

B = Distance from bottom of the grave to water table = 1.2 m minimum (1.5 m if the burials are in sand).

C = Distance between bodies in a trench burial = 0.4 m

D = Width of individual grave = 0.75 – 1.2 m (1.0 in case of urn)

WT = Water table level (to be considered when it is at its highest level)

Size

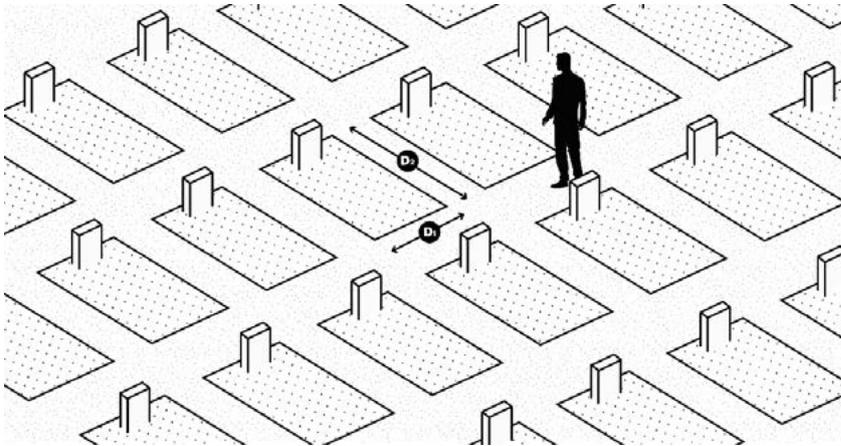
Graves can be arranged in a variety of ways, usually in a row. The size of the bodies determines the size of the graves.

Type of grave	Size (m) – D ₁ x D ₂
Row, for adults	0.75 x 2.10 – 1.20 x 2.50
Row, for children (from 4 to 10 yo)	0.60 x 1.50 – 0.75 x 1.50
Row, for children (up to 3 yo)	0.60 x 1.00

⁷ The minimum distances given for A and B may have to be increased according to soil conditions.

Urn (If applicable)

1.00 x 1.00 – 1.00 x 1.50



As explained in the chapter “Do not”, there are some limitations for the cremation of bodies. In those cases, the urn’s sizes are 1.00 x 1.00 – 1.00 x 1.50 meters.

RECEPTION OF BODIES

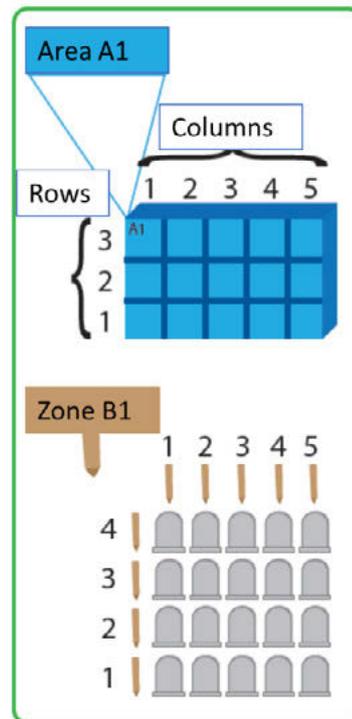
- Everybody accessing the cemetery should be registered by the person receiving the body. This is part of the chain of custody required to ensure traceability of the body and to guarantee that the body buried in certain place is effectively the body registered in the registers of the cemetery records.
- Information such as who brings the body, who received the body, if there is family or relatives, etc. must be recorded. Date and time of reception of the body must be reflected in the register
- Especial attention is necessary for bodies not identified or with no family present to ensure they can be easily located in the cemetery when it is possible at a later date for families to visit and honor their dead relatives
- Records pertaining to each body being buried should have unique / individual consecutive numbers.
- Register should ensure that all the information observed in the coffin or the Body Bag is clearly linked to the unique / consecutive number of the grave or urn in which the body will be located.
- Verify the body has all the documentation required for the burial, including legal permits and other documents as per the local laws.
- The cemetery administrator / municipal services is responsible for the body.
- The cemetery administrator / municipal services must maintain responsibility for the body and its whereabouts in perpetuity.
- Confirm whether there are any personal effects that need to be transferred to the families prior to burial or are there any items that the families would like to bury with the body prior to the ceremony and burial.

SAFETY MEASURES AT CEMETERIES

- It is also the responsibility of the cemetery management with support of the local authorities to uphold all safety precautions for the families and others attending the funeral, such as responsible social distancing, upholding the practice of wearing masks where regulated, safe handling of the body by families, etc.
- During the Covid-19 outbreak, it is important for the cemetery management to know of all suspected or confirmed bodies with Covid-19 arriving at the cemetery and to oversee that all safety precautions are instituted for the health and well-being of the staff and mourners.
- Health and safety in the cemetery extends beyond implementing safe body handling procedures to prevent infection from dead bodies. The excavation of graves, particularly trench graves, must consider safety measures that will prevent collapsing of burial walls as well as appropriate safety equipment such as hard hats and reflective vests for visibility and safe work practices around heavy machinery such as excavators.
- Appropriate safety measures should be managed at the burial sites with careful management of people around the burials to avoid the weight of people causing the edge of burial sites collapsing or accidental falls.

MARKING AND MAPPING

- It is important to properly map the graves / urns on a cemetery map that is maintained and updates by the cemetery management.
- Assign a unique number to each grave.
- Identify per zones, rows, or columns.
- The number in the grave should match the number in the documentation or registers kept in the administration.
- Procure sufficient grave markers for the surge and mark each grave in a way that the marker cannot be not easily removed or deteriorates over time such that the details become obscured or unreadable.
- All perimeter of all graves should be clearly demarcated to avoid accidental exposure of the previously buried remains.
- Cemeteries must be maintained and protected to retain dignity but also so that the cemetery is safe to visit, and burial sites can be located by cemetery officials and families in the future.
- The perimeter of the cemetery should be clearly visible to the public by means of erecting a protective fence or wall that will avoid disturbance or damage to the graves.

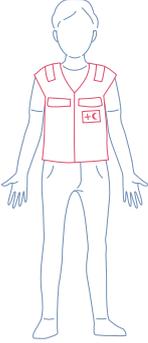
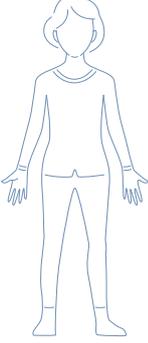
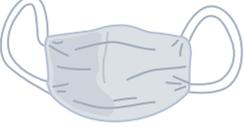
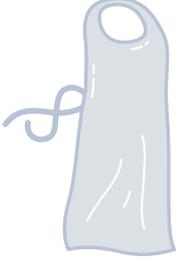
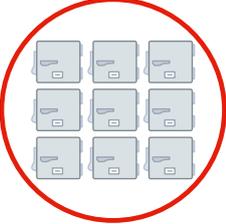


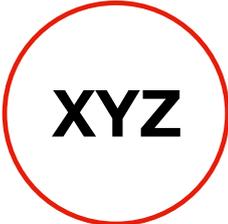
Annex 4: Illustrative recommendations for handling bodies in the community by National Societies and community responders

The following recommendations have been written and more specifically illustrated to further support first responders and others in the community who have permission from authorities and community leaders to handle the bodies of those who have died as a consequence of the Covid-19 pandemic. The International Federation of Red Cross and Red Crescent Societies (IFRC) and the International Committee of the Red Cross, which have significant expertise and experience in managing the dead in conflict, disasters and epidemics, have collaborated to identify the environments, activities, levels of risk of exposure, and the recommended personal protection equipment (PPE) that is likely to provide the necessary barrier protection for those who are working to support their communities in the respectful and dignified management of the dead. It also serves as a reminder that Covid-19 does not pose the same risk as pathogens like Ebola. It is also important to note the PPE is in short supply across the world. It is, therefore, very important that responders wear PPE responsibly and conservatively to avoid causing unnecessary panic and to prevent PPE from running out and thereby causing increased risk for those who perform handling of the dead in communities. These illustrative recommendations are a supplement to existing guidelines that have been drafted by the Movement to date and are not to be considered a substitute. What this document may assist with is providing an illustrative set of recommendations about the PPE to be worn.

The safety of the responders and the community must be viewed as the highest priority to reduce the spread of the infection. Dignity of the dead and compassion and respect for bereaved families must never be disregarded or overlooked.

Illustration legend

National Society responder	Community responder/ family	Disposable surgical gloves	Reusable rubber gloves
			
Cloth mask	Medical/surgical mask	Respirator (FFP2/N95 or FFP3/N99)	Rubber boots or shoe protection
			
Disinfectant sprayer	Eye protection (face shield or goggles)	Gown (disposable or reusable)	Disposable apron
			
Health facility	Mortuary	Private transportation	Public transportation (e.g. taxi)
			

Private home	Cemetery, cremation site, or site of mourning	Red Cross Red Crescent branch or facility	Scene of Death/Body Recovery
	 		
Mass casualty event or disaster requiring MotD	Clarification/emphasis	Option or alternative	Risk level
			High Medium Low Very Low

How to read these tables:

The tables cannot reasonably accommodate every scenario responders are exposed to or include every activity that they may be called upon to carry out. As part of the response approach please consider the following points that should guide your decision and determine the necessary precautions and safety measures that should be taken:

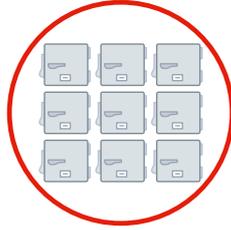
- Always conduct a risk assessment so that you understand the risk associated with the environment and the activities
- Always know and comply with safety policies and precautions of a facility and institution before entering
- If the activity you are performing is not included in this table, seek guidance from your organization or leadership
- Do not enter any potentially unsafe environment without proper training and equipment
- Do not enter places of potential risk unless there is a specific role you need to play
- Safety should remain your priority and your responsibility

Hospital wards/common areas

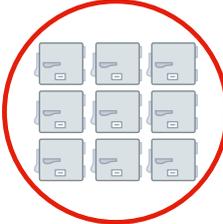
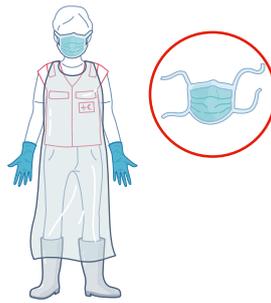
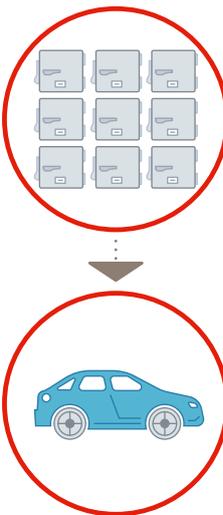
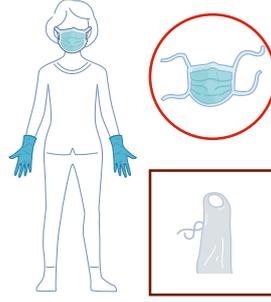


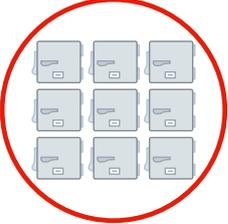
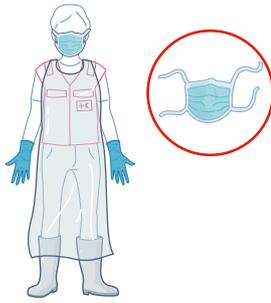
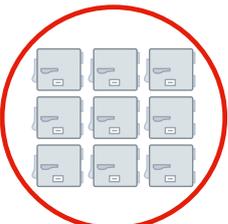
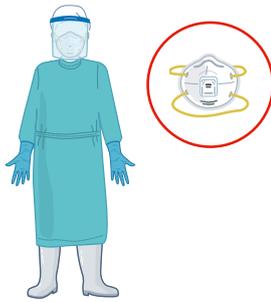
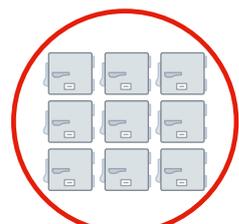
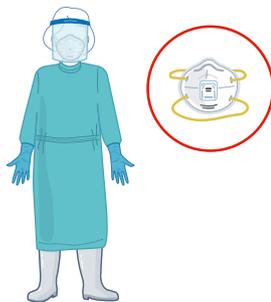
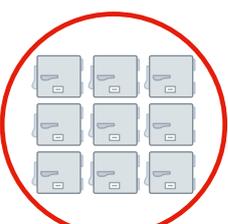
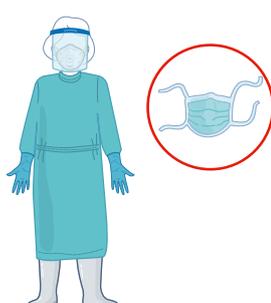
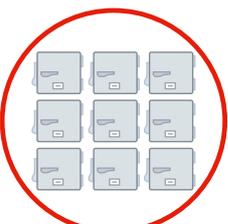
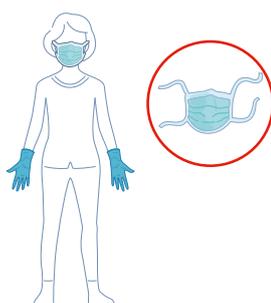
The required PPE to be worn by responders performing any activity in the general hospital will be defined by hospital policy and procedures based on specific areas of the hospital where the responder is working, the level of exposure risk and the specific activities conducted. The same level of PPE should be used when handling the deceased as when providing care to the living in that same ward/context. The PPE required to be worn as per hospital policy must be confirmed prior to entering the hospital. Policy regarding donning and doffing as well as disposal of worn PPE must also be complied with.

Mortuary



The required PPE to be worn by responders performing any activity in the mortuary will be defined by hospital/mortuary policy and procedures. In the absence of policy and procedures, recommendations included in the guidance for handling bodies for National Societies and communities should be followed as in this illustrated guidance. Depending on the level of exposure risk and the specific activities conducted the level of protection can be adjusted. The PPE required to be worn as per hospital/mortuary policy must be confirmed prior to entering the hospital. Policy regarding donning and doffing as well as disposal of worn PPE must also be complied with.

Environment/location	Activity	Recommended PPE and risk level	Illustration
<p>Mortuary – reception/release</p> 	<p>Admitting/releasing bodies</p>	<ul style="list-style-type: none"> Mask Gloves Apron Boots or shoe protection <p><i>Medium risk</i></p>	<p>Responder</p> 
<p>Mortuary – reception/exit</p> 	<p>Releasing bodies to families</p>	<ul style="list-style-type: none"> Mask Gloves Apron (if available) <p>Requires families to be provided with the knowledge of COVID-19 risks as well as PPE necessary to handle, transport and bury the body safely</p> <p><i>Medium risk</i></p>	<p>Family member</p> 

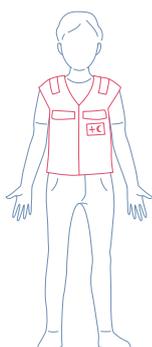
<p>Mortuary – all</p> 	<p>Movement and storage of bodies/ disposal of PPE</p>	<ul style="list-style-type: none"> • Mask • Gloves • Apron • Boots or shoe protection <p><i>Medium risk</i></p>	
<p>Mortuary – autopsy room</p> 	<p>Examination of bodies (external examinations and complete autopsy)</p>	<ul style="list-style-type: none"> • Respirator (FFP3) • Gloves • Eye protection • Apron and gown • Boots or shoe protection <p><i>High risk</i></p>	
<p>Mortuary – autopsy/ preparation room</p> 	<p>Preparing bodies for release (e.g. place in body bag or coffin)</p>	<ul style="list-style-type: none"> • Respirator (FFP2 or FFP3) • Gloves • Eye protection • Apron or gown • Rubber boots or shoe protection <p><i>Medium risk</i></p>	
<p>Mortuary – viewing room</p> 	<p>Body viewing – with responder supervising the process. Includes transferring the body for viewing, opening the body bag and preparing body for viewing</p>	<ul style="list-style-type: none"> • Mask • Gloves • Gown or apron • Rubber boots or shoe protection <p><i>Medium risk</i></p>	<p>Responder supervising</p> 
<p>Mortuary – viewing room</p> 	<p>Viewing body - family member</p>	<ul style="list-style-type: none"> • Mask • Gloves <p><i>Low risk</i></p>	<p>Family member</p> 

Community-led handling of the dead



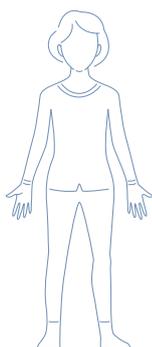
In places where mortuary services are not standard or universally available, National Societies may be called upon to support families and community leaders to safely prepare bodies of suspected COVID-19 cases for burial or cremation. Because the virus can be spread during close contact (e.g. within one to two metres) with an infected person, and because people can infect others before they know they have contracted the virus, it is also important to modify funeral practices to facilitate physical distancing between caretakers and mourners. National Societies, in their support to communities affected by outbreaks of COVID-19, can support families and community and religious leaders to adapt their traditional burials, cremations or other body disposition practices to carry them out safely, along with supported adapted mourning practices that meet local social, cultural and religious needs. In all contexts with community transmission of COVID-19, funeral and mourning rites will need to be adapted to allow for physical distancing between mourners.

ROLES



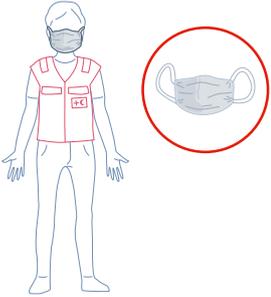
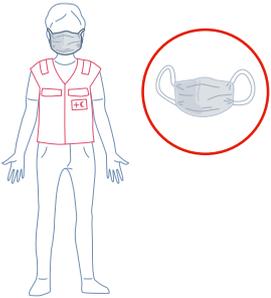
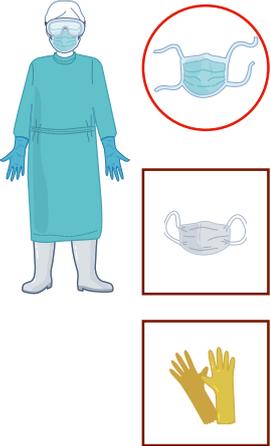
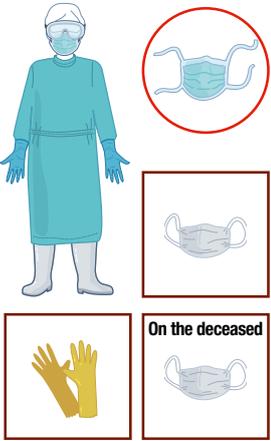
Body handling educator

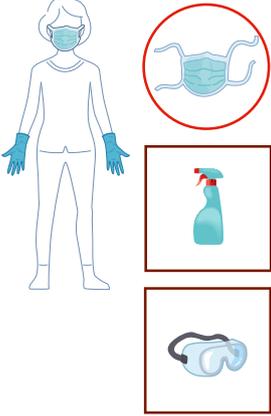
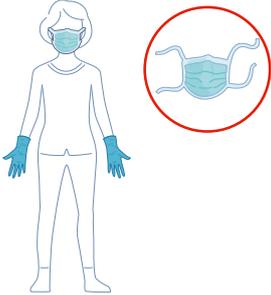
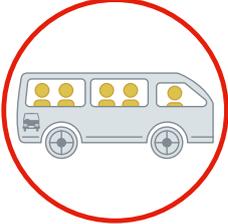
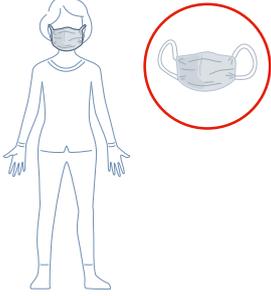
Red Cross Red Crescent volunteer or staff member who will support families and traditional body handlers (i.e. those involved in preparing bodies for burial or cremation) to help them safely prepare the bodies of the deceased and carry out safe mourning rites. This person does not directly touch the body of the deceased.

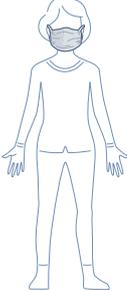
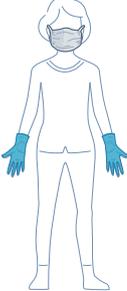
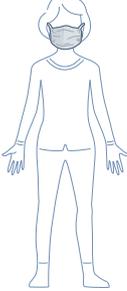


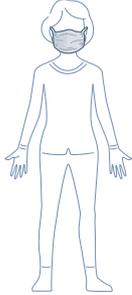
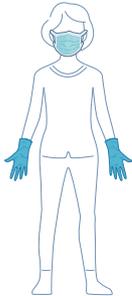
Body handler

Family member, religious or traditional leader or other appropriate body handler who prepares the deceased for burial or cremation, directly touching the body of the deceased.

<p>Branch office</p>  <p>Body handling educator</p>	<p>Report of death, documentation, equipment preparation and risk assessment</p>	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	
<p>Residence/public space</p>  <p>Body handling educator</p>	<ol style="list-style-type: none"> 1. Arrival at residence 2. Engagement with family and authorities 3. Documentation 4. Entering immediate vicinity of the dead body (maintain two metres distance and no touch with anyone) 	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	
<p>Residence/public space</p>  <p>Body handler(s)</p>	<ol style="list-style-type: none"> 1. Removing any coverings from the body (bedding, etc) 2. Removing any personal belongings (not clothing, but jewellery, etc.) 	<ul style="list-style-type: none"> • Mask • Eye protection • Gloves • Apron or gown <p>Alternatives:</p> <ul style="list-style-type: none"> • Cloth mask • Rubber gloves <p><i>Medium risk</i></p>	
<p>Residence/public space</p>  <p>Body handler(s)</p>	<ol style="list-style-type: none"> 1. Undressing, washing and dressing the body (limit where possible) 2. Placing body into a shroud (where customary) 3. Placing body in coffin, body bag or use plastic sheeting to prevent leakage of bodily fluids <p>Body bag preferred if using public vehicle (e.g. taxi) and/or if no coffin is used.</p>	<ul style="list-style-type: none"> • Mask • Gloves • Eye protection • Apron/gown <p>Optional:</p> <ul style="list-style-type: none"> • Mask on the deceased <p><i>Medium risk</i></p>	

<p>Residence/public space</p>  <p>Body handler(s)</p>	<ol style="list-style-type: none"> 1. Disinfecting/ cleaning exterior of body bag or coffin 2. Disinfecting personal items for family to keep 3. Disinfecting residence and/ or providing instructions to relatives to disinfect 	<ul style="list-style-type: none"> • Mask • Gloves <p>If risk of splashing:</p> <ul style="list-style-type: none"> • Goggles or face shield <p><i>Medium risk</i></p>	
<p>Residence/public space</p>  <p>Body handler(s)</p>	<ol style="list-style-type: none"> 1. Removing PPE 2. Storing reusable PPE for later disinfection 3. Bag biohazard PPE for later safe disposal 4. Thoroughly wash hands 	<ul style="list-style-type: none"> • Mask • Gloves <p><i>Medium risk</i></p>	
<p>Residence/public space</p>   <p>Public or shared vehicle (e.g. taxi) or family's own vehicle</p>	<p>Transporting body to the cemetery or crematorium</p> <p>If the body is transported in a public or shared vehicle, a body bag or coffin is recommended. If none is available, wrap the body in plastic sheeting, or as a last resort in cloth sheeting.</p>	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	

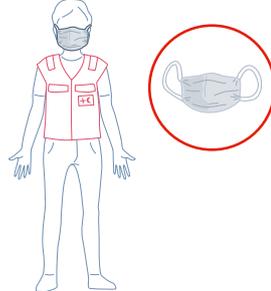
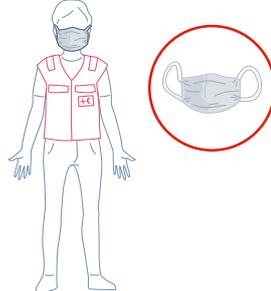
<p>Cemetery or Cremation Site</p>   <p>Gravesite/crematorium workers</p>	<ul style="list-style-type: none"> • Digging and filling a burial site, or • Preparing a pyre or cremation chamber 	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Very low risk</i></p>	 
<p>Cemetery or Cremation Site</p>   <p>Gravesite/ cremation workers, body handlers or family members, as per custom</p>	<ol style="list-style-type: none"> 1. Instructions to the family/for adapted mourning etc. 2. Removing the body from vehicle 3. Transporting (carrying) body to the grave or pyre 4. <ol style="list-style-type: none"> a. Lowering shroud, coffin or body bag into the grave b. Placing the body on the pyre or into the cremation chamber 	<ul style="list-style-type: none"> • Cloth mask - engagement with the living • Gloves <p><i>Low risk</i></p>	  
<p>Transportation vehicle</p>  <p>Body handler(s)</p>	<ol style="list-style-type: none"> 1. Cleaning vehicle used for body transportation 2. Disinfecting area of vehicle where body was transported 	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	 

<p>Cemetery or Cremation Site</p>   <p>Gravesite/crematorium workers</p>	<ol style="list-style-type: none"> 1. Removing and discarding all disposable gloves into a waste bag (seal the bag) 2. Disinfecting footwear too, where possible 3. All wash hands thoroughly 	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	 
<p>Branch office</p>  <p>PPE store manager</p>	<p>Waste disposal/ incineration</p>	<ul style="list-style-type: none"> • Mask • Gloves <p><i>Low risk</i></p>	  

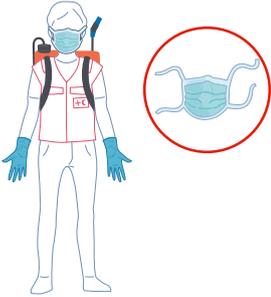
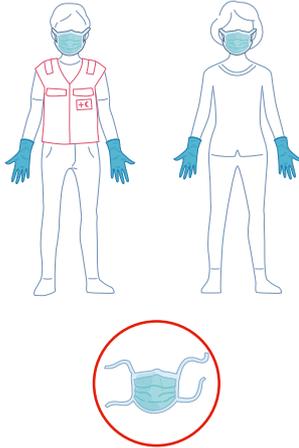
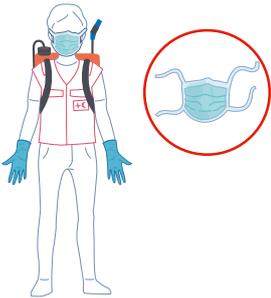
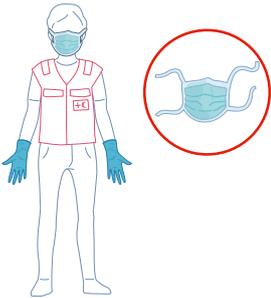
Private home in the community (National Society direct response)

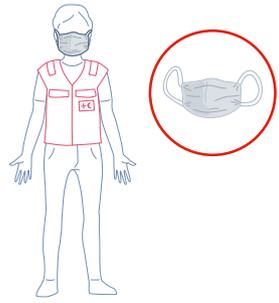
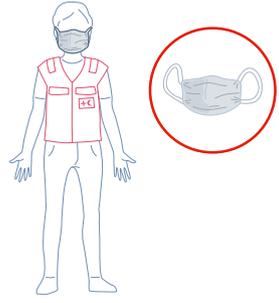
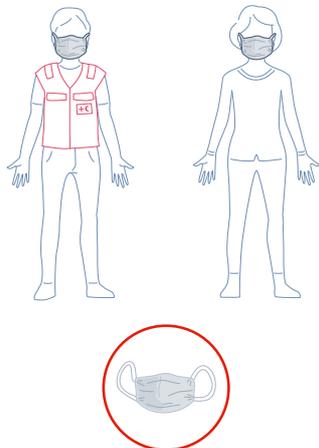


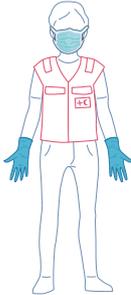
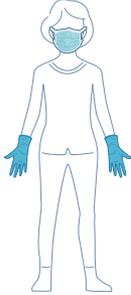
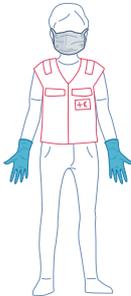
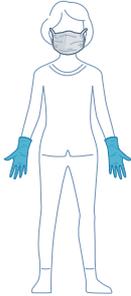
There is a high potential risk for a significant increase in the number of fatalities in a very short time overwhelming local capacities with the subsequent additional pressure on the health and medico-legal systems as well as on other service providers involved in the Management of the Dead (MotD). It might be the scenario that with an increased number of deaths, not all patients get medical attention or go to a medical facility, therefore death occurs at home. In these cases, National Societies may be asked to directly carry out burial or cremation preparations and body transportation.

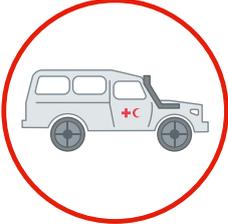
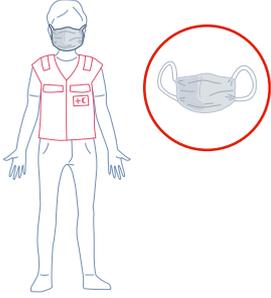
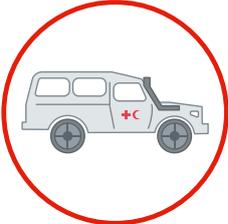
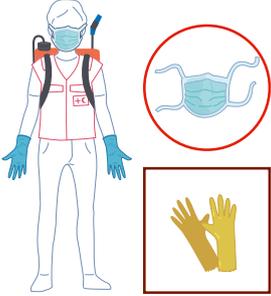
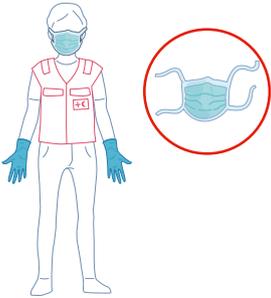
Environment/location	Activity	Recommended PPE and risk level	Illustration
<p>National Society branch office</p>  <p>Vehicle</p> 	<p>Report of death, preparation of team and/or equipment for deployment, risk assessment and deployment</p>	<ul style="list-style-type: none"> Cloth mask - engagement with the living <p><i>Low risk</i></p>	
<p>Residence/public space</p> 	<ol style="list-style-type: none"> 1. Arrive at residence 2. Engaging with family and authorities 3. Documenting death (e.g. interview with family, with no touch) 4. Entering immediate vicinity of the deceased (no touch, observe only) 	<ul style="list-style-type: none"> Cloth mask - engagement with the living <p><i>Low risk</i></p>	

<p>Residence/public space</p> 	<p>Removing any coverings on the body (bedding, etc.)</p>	<ul style="list-style-type: none"> • Mask • Eye protection • Gloves • Gown or apron • Rubber boots or shoe protection <p>Optional:</p> <ul style="list-style-type: none"> • Mask on the deceased (cloth or medical) <p><i>Medium risk</i></p>	
<p>Residence/public space</p> 	<ol style="list-style-type: none"> 1. Placing mask on the deceased (optional) 2. At family's request removing any personal belongings (e.g. jewellery) 3. Family may wish to remove belongings and should be allowed to do so wearing appropriate PPE (mask, gloves and eye protection) 4. Disinfecting personal items before handing items over to relatives 	<ul style="list-style-type: none"> • Mask • Eye protection • Gloves • Gown or apron • Rubber boots or shoe protection <p>Optional:</p> <ul style="list-style-type: none"> • Mask on the deceased (cloth or medical) <p><i>Medium risk</i></p>	
<p>Residence/public space</p> 	<ol style="list-style-type: none"> 1. Placing a body tag on the body. 2. Tilting body left and right to place cautiously into a body bag (where used). 3. Placing body tag onto the body bag zipper eyelet after body bag is closed (preferred) and/or details written onto body bag with permanent marker pen (least preferred). 4. Optional mask removed from the deceased, if desired. <p>Family may wish to place their loved one into the body bag and may need supervision, guidance and the same PPE as a responder</p> <p>If a body bag is available and acceptable, its use is preferable to prevent leakage and potential exposure</p>	<ul style="list-style-type: none"> • Mask • Eye protection • Gloves • Gown or apron • Rubber boots or shoe protection <p><i>Medium risk</i></p>	

<p>Residence/public space</p> 	<p>Disinfecting the outside of the body bag or coffin</p>	<ul style="list-style-type: none"> • Mask • Gloves • Sprayer <p><i>Medium risk</i></p>	
<p>Residence/public space</p> 	<p>Placing the body onto the stretcher and transferring it from the residence to a vehicle</p> <p>Family may want to remove body and carry to cemetery on foot</p>	<ul style="list-style-type: none"> • Mask • Gloves <p><i>Low risk</i></p>	
<p>Residence/public space</p> 	<p>Disinfecting residence and/or instructions to relatives on how to disinfect</p>	<ul style="list-style-type: none"> • Mask • Gloves • Sprayer <p><i>Low risk</i></p>	
<p>Residence/public space</p> 	<p>Removing PPE and discarding of disposable PPE into waste bag and sealed</p> <p>Disinfecting reusable PPE</p> <p>Handwashing before and after removing PPE</p> <p>Replace used mask with clean cloth mask as a general precaution</p>	<ul style="list-style-type: none"> • Mask • Gloves <p><i>Low risk</i></p>	

<p>Response vehicle</p> 	<p>Transporting the body to the cemetery/cremation site</p> <p>Unless NS specifically required/requested to transport bodies, preference is for family to transport body to burial / cremation site</p>	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	
<p>Cemetery or Cremation Site</p>  	<p>Admitting/registering the body for burial or cremation with administration of cemetery or cremation site</p>	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	
<p>Cemetery or Cremation Site</p>  	<ul style="list-style-type: none"> • Digging and filling a burial site, or • Preparing a pyre or cremation chamber 	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	

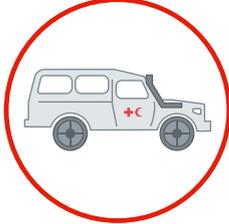
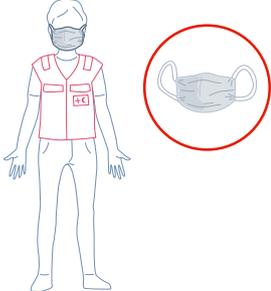
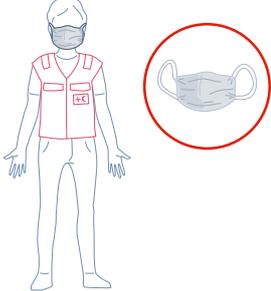
<p>Cemetery or Cremation Site</p>  	<p>Removing the body from a vehicle and transporting it to the burial / cremation site</p> <p>Family may wish to conduct this process.</p>	<ul style="list-style-type: none"> • Cloth mask - engagement with the living • Gloves <p><i>Very low risk</i></p>	  
<p>Cemetery or Cremation Site</p>  	<p>Placing the shroud, coffin or body bag into the grave or onto the pyre</p>	<ul style="list-style-type: none"> • Cloth mask - engagement with the living • Gloves <p><i>Very low risk</i></p>	  
<p>Cemetery or Cremation Site</p>  	<p>Removing and discarding all disposable PPE into a waste bag and seal it</p> <p>Disinfecting reusable PPE, including rubber boots</p>	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	 

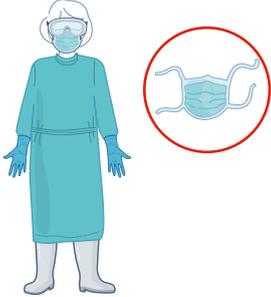
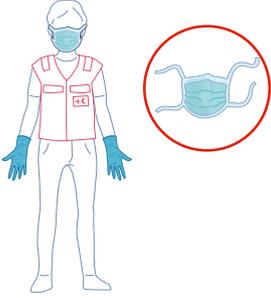
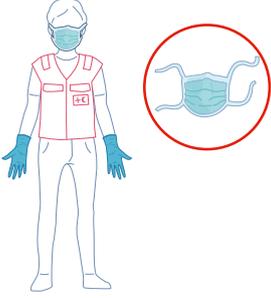
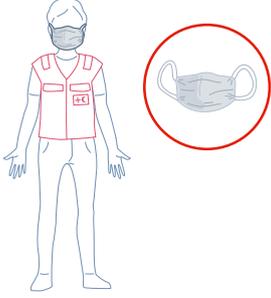
<p>Return to branch</p> 	<p>Returning to the National Society branch office</p>	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	
<p>Branch office</p> 	<p>Disinfecting vehicle</p>	<ul style="list-style-type: none"> • Mask • Gloves <p><i>Low risk</i></p>	
<p>Branch office</p> 	<p>Waste disposal as per biohazardous waste procedures</p>	<ul style="list-style-type: none"> • Mask • Gloves <p><i>Low risk</i></p>	

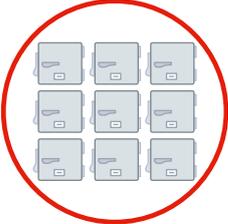
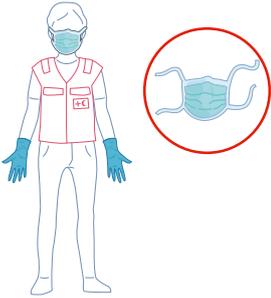
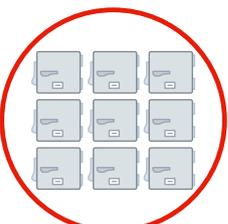
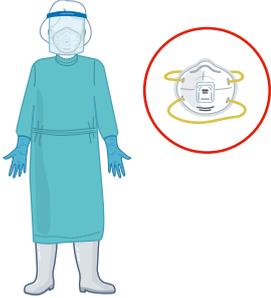
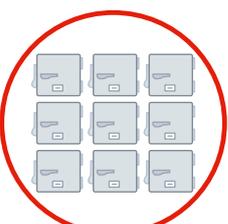
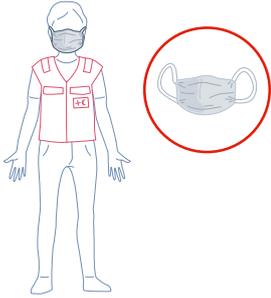
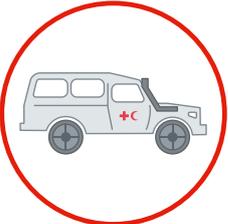
Mass fatality incident unrelated to COVID-19 in areas with active COVID-19 transmission

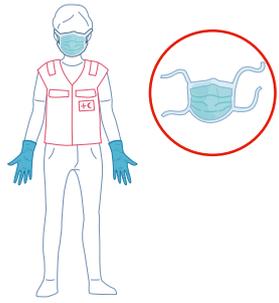
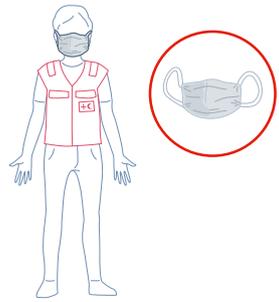


Disasters and emergencies requiring MotD may also occur during the COVID-19 pandemic, and could require response from National Societies equipped, trained and mandated to provide auxiliary support. As standard MotD mandates equipment to protect against a variety of health risks and hazards, existing guidance and PPE recommendations are sufficient to reduce the risk of post-mortem COVID-19 transmission in this context. However, MotD staff and volunteers should be oriented on the COVID-19 burial guidance to ensure that practices are up to date.

Environment/location	Activity	Recommended PPE and risk level	Illustration
<p>Branch office</p>  <p>Vehicle</p> 	<p>Receive request for body recovery, preparation of team, documents and equipment for deployment, risk assessment, and deployment</p>	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	
<p>Scene</p> 	<p>Arrive at the scene and engage with the authority.</p> <p>Scene assessment (risk assessment and determination of site needs)</p>	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	

<p>Scene</p> 	<ol style="list-style-type: none"> 1. Documenting 2. Photographing, 3. Body and body bag tagging 4. Assisting authorities with searching pockets, and moving body for observations 5. Body handling and transferring a body into body bag 	<ul style="list-style-type: none"> • Mask • Gloves • Eye protection • Disposable coverall or gown, • Rubber boots or shoe protection <p><i>Medium risk</i></p>	
<p>Scene</p> 	<p>Transferring the body bag to vehicle</p>	<ul style="list-style-type: none"> • Mask – engagement with the living • Gloves <p><i>Medium risk</i></p>	
<p>Scene</p> 	<ol style="list-style-type: none"> 1. Removing PPE 2. Disinfecting reusable equipment 3. Discarding disposable PPE into waste bag and sealing it 	<ul style="list-style-type: none"> • Mask • Gloves <p><i>Medium risk</i></p>	
<p>Scene</p> 	<p>Thoroughly wash hands</p>	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	
<p>Vehicle</p> 	<p>Transporting body to the mortuary</p>	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	

<p>Mortuary</p> 	<ol style="list-style-type: none"> 1. Entering mortuary and registering the body with mortuary staff 2. Placing body in the refrigerator or storage area 	<p>When no autopsy being performed in the same room:</p> <ul style="list-style-type: none"> • Mask • Gloves <p><i>Low risk</i></p>	
<p>Mortuary</p> 	<ol style="list-style-type: none"> 1. Removing PPE and discarding disposable PPE items in appropriate waste receptacle for incineration 2. Disinfecting rubber boots and other reusable items 	<ul style="list-style-type: none"> • Respirator • Gloves • Eye protection • Apron or gown • Rubber boots or shoe protection <p><i>High risk</i></p>	
<p>Mortuary</p> 	<p>Thoroughly wash hands</p>	<ul style="list-style-type: none"> • Cloth mask - engagement with the living <p><i>Low risk</i></p>	
<p>Vehicle</p> 	<p>Disinfecting the vehicle and the stretcher</p>	<ul style="list-style-type: none"> • Mask • Gloves • Sprayer <p><i>Low risk</i></p>	

<p>Vehicle</p> 	<p>1. Removing PPE and safely discarding disposable PPE in the appropriate waste receptacle for incineration 2. Wash hands thoroughly</p>	<ul style="list-style-type: none"> • Mask • Gloves <p><i>Low risk</i></p>	
<p>Vehicle</p> 	<p>Return to the branch</p>	<ul style="list-style-type: none"> • Clean cloth mask – engagement with the living <p><i>Low risk</i></p>	

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