



Ministry of Health  
Brunei Darussalam

# INFECTION PREVENTION AND CONTROL GUIDANCE FOR THE HANDLING OF DECEASED BODIES IN BRUNEI DARUSSALAM

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## SUMMARY OF CHANGES

DATE	ACTION	ACTION BY
16/09/2020	Format amended to Ministry of Health’s Policy format	Dr Hajah Rosmonaliza binti Haji Awang Asli, Infectious Diseases Consultant

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## 1.0 INTRODUCTION

**1.1** The risk of transmission of communicable diseases is greater from the living than deceased persons.

**1.2** However, the risks of infection from the bodies of people who die of communicable diseases is greatest in those who have extensive contacts with a deceased body such as medical and nursing personnel; emergency medical services personnel; body handlers (*penggapai*); pathologists and other autopsy personnel; mortuary attendants; funeral directors and embalmers.

**1.3** The risk of potential disease transmission from the handling of these deceased bodies can be minimized by the implementation of appropriate infection prevention and control measures.

## 2.0 PURPOSE

**2.1** This document aims to provide guidance on the appropriate infection prevention and control measures required when handling deceased bodies in Brunei Darussalam.

## 3.0 SCOPE

**3.1** This guidance is applicable to all those who handle deceased bodies in Brunei Darussalam.

## 4.0 DEFINITIONS

### 4.1 Bagging:

4.1.1 Refers to the placing of the deceased body in leak-proof body bags for storage and transport.

### 4.2 Cleaning:

4.2.1 Refers to the physical removal of visible soil (organic or inorganic material) from objects and surfaces, which can be done manually or mechanically using water and detergents.

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#### **4.3 Contact Time:**

4.3.1 The time that a disinfectant must be in contact with a surface or device to ensure that appropriate disinfection has occurred. For most disinfectants, the surface should remain wet for the required contact time.

#### **4.4 Detergent:**

4.4.1 A synthetic cleansing agent that can emulsify oil and suspend soil. A detergent contains surfactants that do not precipitate in hard water and may also contain protease enzymes (Enzymatic Cleaner) and whitening agents.

#### **4.5 Disinfectant:**

4.5.1 A product that is used on environmental surfaces or medical equipment which results in disinfection of the equipment. Some products combine a detergent with a disinfectant.

#### **4.6 Disinfection:**

4.6.1 The process that inactivates pathogenic microorganisms, except bacterial spores. Cleaning needs to be conducted before effective disinfection can take place.

#### **4.7 Embalming:**

4.7.1 Refers to the process of injecting preservatives into the deceased body to slow down the process of decay.

#### **4.8 Enhanced Personal Protective Equipment (PPE):**

4.8.1 Refers to the use of a set of PPE for complete protection against potential exposure of body fluids and airborne particles from patients with suspected or known to have epidemiologically important, highly transmissible or pathogenic, virulent or life-threatening diseases such as viral haemorrhagic diseases e.g. Ebola Virus Disease, which includes N95 (or equivalent) mask, hair cover using Operating Theatre (OT) cap, eye protection (goggles or face-shield visor), fluid-impermeable coveralls

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(Jupiter suit), disposable plastic apron, disposable gloves and fluid-impermeable rubber boots.

#### **4.9 Hospital-grade Disinfectant:**

4.9.1 Refers to disinfectants that are bactericidal, virucidal which has activity against non-enveloped viruses such as norovirus, mycobacterial and sporicidal. An example of a hospital-grade disinfectant is chlorine-based preparations.

#### **4.10 Hygienic preparation:**

4.10.1 Refers to the cleaning and washing of the deceased body before burial.

#### **4.11 Safety Data Sheets (SDS):**

4.11.1 A document which is prepared by the supplier or the manufacturer of the material or chemical that contains information on the potential hazards (health, fire, reactivity and environmental) and how to work safely with the product. It also contains information on the use, storage, handling and emergency procedures of all the related hazards of the material.

#### **4.12 Standard Precautions:**

4.12.1 In relation to the handling of deceased bodies, Standard Precautions refer to a set of measures that should be implemented during the handling of **ALL** dead bodies, regardless of their diagnosis or presumed infectious status.

4.12.2 The measures are designed to reduce the risk of transmission of known, suspected and undiagnosed infectious diseases from the exposure of blood, body fluids or tissues of the dead body.

4.12.3 For the handling of deceased bodies, the components of Standard Precautions include the following:

4.12.3..1 Hand Hygiene (Annex 1)

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4.12.3..2 The use of Personal Protective Equipment (PPE), selected in accordance to the type of activity and anticipated exposure risk (Annex 2)

4.12.3..3 Appropriate handling of equipment, in a manner that prevents exposure to skin and mucous membrane, contamination of clothing and transfer of microorganisms to self, other persons and the environment.

4.12.3..4 Appropriate handling of linen, in a manner that prevents exposure to skin and mucous membrane, contamination of clothing and transfer of microorganisms to self, other persons and the environment.

4.12.3..5 Appropriate handling and disposal of sharps, in a manner to prevent injuries.

4.12.3..6 Appropriate management of waste.

#### **4.13 Terminal Cleaning:**

4.13.1 Refers to the thorough cleaning of the environmental surfaces to remove contaminating microorganisms by using detergent and disinfectants.

#### **4.14 Transmission-Based Precautions:**

4.14.1 In relation to the handling of deceased bodies, in addition to Standard Precautions, Transmission-based Precautions refer to sets of measures that are designed for the handling of cases with **KNOWN OR SUSPECTED** to be infected or colonized by epidemiologically important or highly transmissible diseases, based on the routes of transmission of the infectious diseases.

4.14.2 The types of Transmission-Based Precautions are as follows:

4.14.2..1 Contact Precautions

4.14.2..2 Droplet Precautions

4.14.2..3 Airborne Precautions

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4.14.3 Refer to Appendix 1 for examples of conditions/infectious agents requiring Transmission-Based Precaution and Appendix 2 for the Personal Protective Equipment (PPE) required for the type of Transmission-Based Precautions.

#### **4.15 Viewing:**

4.15.1 Refers to allowing the family to see, and spend time with the deceased body before burial.

### **5.0 ROLES AND RESPONSIBILITIES**

**5.1** All personnel involved with the handling of deceased bodies are to comply with the infection prevention and control (IPC) measures outlined in this guidance.

**5.2** The respective facility or relevant departmental administrators are to ensure that the infection prevention and control (IPC) measures outlined in this guidance are being implemented and the items and equipment required to carry out the measures are in adequate and in continuous supply and are of the required standard.

### **6.0 CATEGORIES OF DECEASED BODIES**

**6.1** Based on the mode of transmission and the risk of infection of the different infectious diseases, deceased bodies are categorized into Category 1, 2 or 3.

**6.2** Refer to Appendix 3 for risk category group of deceased bodies and recommended minimum Personal Protective Equipment (PPE) required.

### **7.0 GENERAL INFECTION PREVENTION AND CONTROL MEASURES**

#### **7.1 Immunisation**

7.1.1 As there is risk of exposure to blood, all those who are involved in the handling of deceased bodies, including cleaners involved in the cleaning of the facility where deceased bodies are handled, are strongly recommended to be vaccinated against Hepatitis B virus and have their

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immunity documented i.e. serum Hepatitis B antibody (Anti HBs) level is  $\geq$  10 IU/L.

- 7.1.2 As there is also risk of exposure to faecal material, the staff are also recommended to be vaccinated against Hepatitis A virus and have their immunity documented by reactive total Hepatitis A virus antibody (total HAV Ab).

## **7.2 Personal and Environmental Hygienic Measures**

- 7.2.1 Make sure to cover own wounds, cuts and abrasions with water-proof bandages before handling deceased bodies.
- 7.2.2 Avoid touching own face, eyes, nose and mouth during the handling of deceased bodies to prevent exposing the mucous membranes.
- 7.2.3 Avoid touching environmental surfaces unnecessarily during the handling of deceased bodies, to reduce the contamination of the environmental surfaces.
- 7.2.4 Do NOT eat, drink or smoke during the handling of deceased bodies.
- 7.2.5 Perform hand hygiene by washing hands with soap and water after handling deceased bodies and after removing and disposing of Personal Protective Equipment (PPE) using the correct steps.

## **8.0 HANDLING OF DECEASED BODIES ACCORDING TO THE RISK CATEGORY**

### **8.1 Category 1 & 2 Bodies**

#### **8.1.1 Preparation of Bodies by Ward Staff for Transportation**

- 8.1.1.1 If the deceased died in the hospital setting, before transportation, Category 1 & 2 bodies are to be prepared by the ward nurses using appropriate Personal Protective Equipment (PPE), that are to be worn before handling the body.



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- 8.1.1..2 The minimum PPE required include:
- 8.1.1..2.1 Disposable gloves (use 2 pairs when handling Category 2 bodies)
  - 8.1.1..2.2 Fluid-impermeable disposable long-sleeve gown
  - 8.1.1..2.3 Splash-proof disposable surgical mask
  - 8.1.1..2.4 Eye protection (goggles or face-shield)
- 8.1.1..3 Enhanced PPE may be chosen depending on the perceived risk. Check for the latest PPE advice from the Ministry of Health for specific diseases particularly during outbreak or pandemic situation e.g. COVID-19.
- 8.1.1..4 The preparation of the body involves the removal of any indwelling catheters (central and peripheral intravenous catheters, urinary catheter, nasogastric tube, colostomy bag etc), cleaning the deceased of any soilage and covering the deceased body's open wounds using gauze and water-proof dressing or bandage.
- 8.1.1..5 After cleaning, Category 1 bodies are to be covered in linen. Use of body bags is not required.
- 8.1.1..6 For Category 2 bodies, the body is to be covered in linen before placing in double leak proof body bags.
- 8.1.1..6.1 The outer surface of each body bag is to be cleaned and disinfected using appropriate hospital-grade disinfectant.
    - 8.1.1..6.1.1 Refer to the disinfectant Safety Data Sheet (SDS) for instruction on how to prepare the disinfectant, the required PPE to be used during preparation and on the contact time.

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8.1.1..6.1.2 If using diluted sodium hypochlorite solution, prepare it at a required concentration of available chlorine of 10,000 parts per million (ppm).

8.1.1..6.1.3 For sodium hypochlorite solution, leave it on the surface (contact time) for at least 15 minutes before rinsing with water.

8.1.1..7 Once the procedure is completed, the PPE is to be removed and disposed in biohazard bin as clinical waste and hand hygiene performed by washing the hands with soap and water immediately (Annex 1).

#### 8.1.2 **Location of Conduct of Final Body Preparation:**

8.1.2..1 Deceased bodies categorized as Category 1 can be handled by the family and body handlers (*penggapai*) in the community using Standard Precautions.

8.1.2..2 To reduce the risk of disease transmission, the final preparation of deceased bodies categorized as Category 2 and 3 should be carried out in a controlled hospital setting by body handlers (*penggapai*) trained in the aspect of infection prevention and control with **NO** family members to be allowed to participate.

#### 8.1.3 **Personal Protective Equipment (PPE) for Final Preparation of Body by the Body Handlers (*Penggapai*)**

8.1.3..1 Before handling the bodies, the body handlers (*penggapai*) are to put on appropriate PPE.

8.1.3..2 The minimum PPE for handling Category 1 & 2 bodies include the following:

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8.1.3..2.1 Disposable gloves (use 2 pairs when handling Category 2 bodies)

8.1.3..2.2 Fluid-impermeable disposable long-sleeve gown

8.1.3..2.3 Splash-proof disposable surgical mask

8.1.3..2.4 Eye protection (goggles or face-shields)

8.1.3..2.5 Protective boots

8.1.3..3 Enhanced PPE may be chosen depending on perceived risk. Check for the latest PPE advice from the Ministry of Health for specific diseases particularly during pandemic situation e.g. for COVID-19.

8.1.3..4 After final preparation, Category 1 bodies do not need to be placed in body bags before burial. However, Category 2 bodies need to be placed in leak proof double bags before burial.

8.1.3..5 Once the procedure is completed, the PPE is to be removed and disposed in biohazard bin as clinical waste and hand hygiene performed by washing the hands with soap and water immediately (Annex 1).

#### 8.1.4 **Transporting to the Burial Ground**

8.1.4..1 Once the completely prepared body is ready to be transported to the burial ground, the body can be safely handled without the use of PPE, and can be handled by family members.

#### 8.1.5 **Environmental Surface Decontamination**

8.1.5..1 Terminal cleaning of the environmental surfaces are to be carried out after completion of the body preparation procedure.

8.1.5..2 The environmental surfaces are to be cleaned with detergent and water to remove any soilage before being disinfected using appropriate hospital-grade disinfectant.

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8.1.5..3 The cleaners are also required to put on appropriate PPE as Standard Precaution before starting the cleaning procedure.

8.1.5..3.1 The minimum PPE required are as in 8.1.3..2

8.1.5..4 Refer Appendix 4 for the environmental surface cleaning and disinfection procedure.

8.1.5..5 The cleaners are to remove the PPE and dispose them in biohazard bin as clinical waste as soon as the cleaning procedure is completed.

8.1.5..6 Hand hygiene by washing the hands with soap and water is to be performed immediately after disposing the PPE (Annex 1).

## 8.2 Category 3 Bodies

- 8.2.1 Category 3 bodies are to be handled with minimum handling by **trained personnel at the site of death** using **enhanced PPE** in a manner that prevents self-contamination. The body should not be transported to any other facility due to risk of cross-contamination.
- 8.2.2 The trained personnel need to include a trained technical supervisor to supervise the infection prevention and control practices during the preparation of the body.
- 8.2.3 **NO** family members or personnel without enhanced PPE on are to be allowed to handle or view the body.
- 8.2.4 The body's natural orifices are to be plugged but the body is not to be cleaned, sprayed, washed or embalmed.
- 8.2.5 Any indwelling catheters are not to be removed from the body.

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- 8.2.6 If the deceased is a Muslim, ceremonial *tayammum* can be performed using sand and sponge using minimal material.
- 8.2.7 The body is then to be wrapped in a plastic shroud or the linen the deceased was on, if plastic shroud is not available.
- 8.2.8 The body should then be placed in double leak-proof body bags of not less than 150 µm thick.
- 8.2.9 Absorbent materials are to be placed between each bag.
- 8.2.10 The outer surface of each body bag is to be cleaned and disinfected using appropriate hospital-grade disinfectant. Disposable hospital-grade disinfectant wipes may be used for this purpose.
- 8.2.11 Once zippered closed, the bag is not to be re-opened.
- 8.2.12 The bagged body is to be placed in a metal casket and sealed.
- 8.2.13 The outer surface of the sealed casket is to be cleaned and disinfected the same way as the cleaning and disinfection of the outer surface of the body bags above.
- 8.2.14 Once disinfected, the casket can be then handled and transported safely to the burial or cremation ground using minimum PPE i.e. the use of disposable gloves.
- 8.2.15 Once the body preparation procedure is completed, the enhanced PPE is to be removed in a manner to prevent self-contamination and disposed of immediately in biohazard bin as clinical waste.
- 8.2.16 Hand hygiene using soap and water is to be performed immediately after.  
(Annex 1)

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### 8.2.17 Environmental Surface Decontamination

8.2.17..1 Terminal surface cleaning and disinfection of the environment where Category 3 bodies were prepared should be done as soon as the body preparation procedure is completed (refer Appendix 5).

8.2.17..2 The staff tasked to clean the site are also required to put on enhanced PPE.

8.2.17..3 Disposable cleaning equipment are recommended to be used to clean and disinfect the site where Category 3 bodies are prepared.

8.2.17..4 Once the procedure is completed, the enhanced PPE is to be removed in a manner to prevent self-contamination and disposed of immediately in biohazard bin as clinical waste.

8.2.17..5 Hand hygiene using soap and water is to be performed immediately after. (Annex 1)

**8.3** Refer to Appendix 4 for a summary on the precautionary measures for handling and disposing of deceased bodies according to the risk category.

## 9.0 REFERENCES

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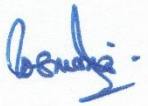



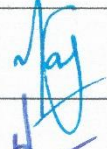
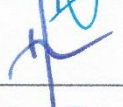

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## Appendix 1

### EXAMPLES OF CONDITIONS/INFECTIOUS AGENTS REQUIRING TRANSMISSION-BASED PRECAUTIONS

Type of Precautions	Contact Precautions	Droplet Precautions	Airborne Precautions
Route of transmission of the infectious agents requiring this precaution	By direct or indirect contact	By droplet particles > 5µm in size that can travel over distances of up to 1 metre	By airborne droplet particles < 5µm in size that can travel in the air over a distance > 1 metre
Examples of conditions/ infectious agents:	<ul style="list-style-type: none"> <li>• <i>Clostridium difficile</i></li> <li>• Norovirus</li> <li>• Rotavirus</li> <li>• Hepatitis A or E with diarrhoea</li> <li>• Acute diarrhoea</li> <li>• Scabies</li> <li>• Hepatitis B, C or HIV with active bleeding</li> <li>• Ebola Virus</li> <li>• Multi-Drug Resistant (MDR) organisms e.g. MDR <i>Acinetobacter baumannii</i>, Extended Spectrum Beta-Lactamases (ESBLs), Carbapenem-Resistant Enterobacteriaceae (CRE), Vancomycin Resistant Enterococci (VRE), Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA).</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Bordetella pertussis</i> (Whooping cough)</li> <li>• Influenza virus</li> <li>• Adenovirus</li> <li>• Rhinovirus</li> <li>• <i>Mycoplasma pneumoniae</i></li> <li>• Viruses causing Severe Acute Respiratory Infections (SARI)</li> <li>• Group A Streptococcus</li> <li>• <i>Neisseria meningitidis</i></li> <li>• Respiratory Syncytial Virus (RSV)</li> <li>• Rubella</li> <li>• Mumps</li> <li>• Hand Foot and Mouth Disease (HFMD)</li> <li>• Methicillin Resistant <i>Staphylococcus aureus</i> (MRSA) pneumonia</li> <li>• Multi-Drug Resistant (MDR) <i>Acinetobacter baumannii</i> pneumonia or respiratory colonization</li> <li>• Pulmonary melioidosis</li> </ul>	<ul style="list-style-type: none"> <li>• Spores of <i>Aspergillus spp.</i></li> <li>• Pulmonary or laryngeal tuberculosis</li> <li>• Measles (Rubeola virus)</li> <li>• Varicella / Herpes zoster</li> <li>• Novel / emerging respiratory illnesses</li> <li>• Smallpox (Variola virus)</li> </ul>

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## Appendix 2

### TRANSMISSION-BASED PRECAUTIONS AND PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIRED

Type of Precautions	Contact Precautions	Droplet Precautions	Airborne Precautions
<b>Components &amp; Personal Protective Equipment (PPE) required:</b>			
Hand Hygiene	√	√	√
Gloves	√	√ ***	√ ***
Surgical Face Mask*	√ ****	√	
N95 (or equivalent) Respirators			√
Protective Gown**	√	√ ****	√ ****
Eye Protection	√ ****	√ ****	√ ****
*Splash-proof **Long sleeve fluid-impermeable *** If anticipated will be in contact with mucous membrane, non-intact skin, blood, body fluid or contaminated items **** If splashes of blood and body fluid anticipated			

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### Appendix 3

#### RISK CATEGORY GROUP OF DECEASED BODIES AND RECOMMENDED MINIMUM PERSONAL PROTECTIVE EQUIPMENT (PPE)

Risk Category	Category 1	Category 2	Category 3
<b>Examples of Infectious Diseases</b>	Infectious diseases other than those specified in Category 2 & 3	<ol style="list-style-type: none"> <li>Human Immunodeficiency Virus (HIV) infection</li> <li>Hepatitis C virus infection</li> <li>Active Hepatitis B virus infection</li> <li>Creutzfeldt-Jacob disease</li> <li>Severe Acute Respiratory Syndrome-related Coronavirus (SARS-CoV)</li> <li>MERS-CoV</li> <li>Other novel viruses</li> <li>Plague</li> <li>Rabies</li> <li>Other infectious diseases as advised by the Disease Control Division or Infectious Diseases Physician or microbiologist</li> </ol>	<ol style="list-style-type: none"> <li>Viral haemorrhagic fevers such Ebola Virus Disease</li> <li>Other infectious diseases as advised by the Disease Control Division or Infectious Diseases Physician or microbiologist</li> </ol>
<b>Recommended Personal Protective Equipment (PPE)</b>			
<b>Gloves</b>	√	√	√
<b>Surgical Face Mask*</b>	√	√	
<b>N95 (or equivalent) Respirators</b>			√
<b>Eye Protection</b>	√	√	√
<b>Hair Cover</b>			√
<b>Protective Gown**</b>	√	√	√ ****
<b>Disposable Plastic Apron</b>			√ *****
<b>Protective Boots</b>	√ ***	√***	√
<p>*Splash-proof  **Long sleeve fluid-impermeable  ***For added protection during hygienic preparation (cleaning and washing of the deceased body)  ****Fluid-impermeable coveralls (Jupiter suit)  *****For added protection of the coveralls which can be easily removed and changed if soiled</p>			

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#### Appendix 4 - SUMMARY TABLE ON PRECAUTIONARY MEASURES FOR HANDLING AND DISPOSING OF DECEASED BODIES ACCORDING TO THE RISK CATEGORY

Risk Category	Bagging	Viewing	Embalming	Hygienic Preparation	Disposal of body
<b>Category 1</b> Other than specified in Category 2 & 3	<b>NOT</b> necessary	Allowed	Allowed with PPE	Allowed with PPE	Standard burial procedure or cremation**
<b>Category 2</b> <ul style="list-style-type: none"> <li>• Human Immunodeficiency Virus (HIV) infection</li> <li>• Hepatitis C virus infection</li> <li>• Active Hepatitis B virus infection</li> <li>• Creutzfeldt-Jacob disease without necropsy</li> <li>• Severe Acute Respiratory Syndrome-related Coronavirus (SARS-CoV)</li> <li>• MERS-CoV</li> <li>• Other novel viruses</li> <li>• Others*</li> </ul>	Double Bagging	Allowed after preparation of the body by trained body handlers ( <i>penggapai</i> ) for Muslims or trained personnel for others	<b>NOT</b> Allowed	Allowed with PPE (by trained body handlers)	Standard burial procedure or cremation**
<b>Category 3</b> <ul style="list-style-type: none"> <li>• Viral haemorrhagic fever</li> <li>• Others*</li> </ul>	Double Bagging	<b>NOT</b> Allowed	<b>NOT</b> Allowed	<b>NOT</b> Allowed	Sealed metal coffin burial or cremation

\*Including other infectious diseases as advised by the Disease Control Division or Infectious Diseases Physician or microbiologist

\*\*According to religious beliefs and customs

**Bagging:** placing the deceased body in leak-proof body bags for storage and transport

**Viewing:** allowing the family to see, and spend time with the deceased before burial

**Embalming:** injecting preservatives into the deceased body to slow down the process of decay

**Hygienic preparation:** cleaning and washing of the deceased body

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## Appendix 5

### PROCEDURE FOR ENVIRONMENTAL SURFACE AND CLEANING DISINFECTION OF DECEASED BODY HANDLING AREAS

NO.	STEPS
1.	Assemble all the required items*: <ol style="list-style-type: none"> <li>1. Hospital-grade disinfectant **</li> <li>2. Detergent</li> <li>3. Container to prepare detergent</li> <li>4. Container to prepare hospital-grade disinfectant</li> <li>5. Surface cleaning equipment</li> <li>6. Personal Protective Equipment (PPE)***</li> </ol>
2.	Cover any open wounds with water-proof bandages
3.	Put on the PPE
4.	Prepare the detergent (in a well-ventilated area) <ul style="list-style-type: none"> <li>- refer to product Safety Data Sheets (SDS) for preparation instruction.</li> </ul>
5.	Prepare the hospital-grade disinfectant (prepare in a well-ventilated area) <ul style="list-style-type: none"> <li>- refer to product Safety Data Sheets (SDS) for preparation instruction.</li> <li>- If using sodium hypochlorite solution (household bleach):</li> <li>- Dilute 1 part bleach with 9 parts water (do not use hot water) to get concentration of 1: 10 (10,000 parts per million of chlorine) –as risk of body fluid and blood contamination of the surface</li> </ul>
6.	Clear up any waste into waste bins and remove $\frac{3}{4}$ filled bins and replace with new ones
7.	Cleaning and disinfection of the environmental surface: <ul style="list-style-type: none"> <li>- Clean the environmental surface with the detergent and water to remove any soilage</li> <li>- Then disinfect the surface with the prepared hospital-grade disinfectant. Follow product SDS for the appropriate contact time. For the diluted bleach, leave on the surface for at least 15 mins before rinsing the surface with water.</li> </ul>
8.	Clean and disinfect the cleaning equipment before leaving to dry
9.	Once completed, remove PPE and dispose in biohazard plastic bags
10.	Wash hands with soap and water
<p>*Use disposable cleaning items when cleaning certain Category 2 (e.g. SARS-CoV 2) body handling areas, particularly during outbreak or pandemic situation and for Category 3 body handling areas.</p> <p>**Appropriate hospital-grade disinfectant should be bactericidal, virucidal (to include activity against non-enveloped viruses such as norovirus), mycobacterial and sporicidal or use chlorine-based solution</p> <p>*** Basic PPE includes disposable gloves, fluid-impermeable long-sleeve gown, splash-proof disposable surgical mask, eye protection (goggles or face-shield), protective boots.</p> <p>For certain Category 2 (e.g. SARS-CoV 2) and all Category 3 Deceased Bodies, enhanced PPE is used-disposable gloves, fluid-impermeable coveralls (Jupiter suit), disposable plastic apron, hair cover with OT cap, N95 or equivalent respirators, eye protection (goggles or face-shield), protective boots.</p>	

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## Annex 1



# 6 steps of hand hygiene

6 langkah pembersihan tangan

**1**




Rub hands palm to palm  
*Gosok kedua telapak tangan*

**2**



Right palm over left dorsum with interlaced fingers and vice versa  
*Gosok telapak tangan sebelah kanan ke bahagian atas tangan sebelah kiri dengan jari-jemari berselang-seli dan sebaliknya*

**3**




Palm to palm with fingers interlaced  
*Gosok kedua-dua telapak tangan dengan jari-jemari berselang-seli*

**4**




Backs of fingers to opposing palms with fingers interlocked  
*Gosok belakang jari-jemari dengan mencengkam jari-jemari kedua-dua belah secara bertentangan*

**5**



Rotational rubbing of left thumb clasped in right palm and vice versa  
*Genggam ibu jari kiri dengan tangan kanan dan gosok secara putaran dan sebaliknya*


**6**



Rotational rubbing, backwards & forwards with clasped fingers of right hand in left palm & vice versa  
*Rapalkan jari-jemari tangan kanan & gosokkan ke telapak tangan sebelah kiri secara putaran, ke belakang & ke depan dan sebaliknya*



HANDWASH WITH SOAP AND WATER  
(40-60 seconds)  
*CUCI TANGAN DENGAN MENGGUNAKAN AIR DAN SABUN (40-60 saat)*




ALCOHOL BASED HANDRUB  
(20-30 seconds)  
*PRODUK BERASASKAN ALKOHOL (20-30 saat)*

Adapted from / Diadaptasi dari



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## Annex 2 TYPES OF PERSONAL PROTECTIVE EQUIPMENT (PPE) AND WHEN TO USE

Type of PPE	When to use	Additional remarks
<b>Gloves</b>	When it is anticipated that the hands will be in contact with mucous membranes, non-intact skin, blood or other body fluids and/or contaminated item	<ul style="list-style-type: none"> <li>• Perform hand hygiene before donning gloves.</li> <li>• Sterile gloves are not necessary, unless performing aseptic procedure.</li> <li>• Do not use the same pair of gloves for the care of more than one patient.</li> <li>• Change or remove gloves before attending to another patient and/or before touching non-contaminated items and environmental surfaces.</li> <li>• Change or remove gloves if moving from a contaminated body site to a clean body site within the same patient.</li> <li>• Discard the removed gloves as clinical waste immediately after use.</li> <li>• Perform hand hygiene immediately after removal and disposal of gloves.</li> <li>• Use heavy duty rubber gloves for housekeeping chores involving potential contact with blood and sharps and for instrument cleaning and decontamination procedures.</li> </ul>
<b>Gown /apron</b>	For procedures and patient care activities that are likely to generate splashes or sprays of blood, body fluids, secretions or excretions.	<ul style="list-style-type: none"> <li>• Select a gown/apron that is appropriate for the activity and the amount of fluid likely to be encountered.</li> <li>• Remove a soiled gown/apron promptly after use in a manner that avoid transfer of microorganisms to self, other patients or the environment.</li> <li>• Discard the used gown/apron as clinical waste immediately after removal.</li> <li>• Perform hand hygiene after removal and disposal of the gown/apron.</li> </ul>
<b>Masks and Eye Protection (goggles or visors) or Face-shield</b>	To protect the mucous membranes of the eyes, nose and mouth for procedures and patient care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, and excretions.	<ul style="list-style-type: none"> <li>• Remove the mask and the eye protection according to manufacturer's instruction and in a manner that avoid transfer of microorganisms to self, other patients or the environment.</li> <li>• Discard the used mask and eye protection or face-shield (if single-use) as clinical waste or clean and disinfect (if reusable) immediately after removal.</li> <li>• Perform hand hygiene immediately after removal of the used mask and eye protection or face-shield.</li> </ul>

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