



**health**

Department:  
Health  
REPUBLIC OF SOUTH AFRICA



# **ENVIRONMENTAL HEALTH GUIDELINES FOR MANAGEMENT OF HUMAN REMAINS IN THE CONTEXT OF COVID-19**

**2020**



## 1) GUIDELINES

### 1.1 Guidelines on management of deceased and disposal of bodies infected with covid-19

Environmental health has a key role to play in monitoring the management of human remains that dies of an infectious disease, including COVID-19. The monitoring will include the following;

- Providing guidance and advice to funeral undertakers on management of infectious human remains;
- Inspection of premises where bodies are prepared, stored and disposed of;

This interim guideline is based on what is currently known about COVID-19.

This virus was first identified in Wuhan, Hubei Province, China and it continues to spread.

Much is unknown about COVID-19. 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, including camels, cattle, cats, and bats. Most often, spread from a living person happens with close contact (i.e., within about 6 feet or 1 metre) via respiratory droplets produced when an infected person coughs or sneezes, similar to how influenza and other respiratory pathogens spread.

This route of transmission is not a concern when handling human remains or performing post-mortem procedures. Post-mortem activities should be conducted with a focus on avoiding aerosol generating procedures, and ensuring that if aerosol generation is likely (e.g. when using an oscillating saw) that appropriate engineering controls and personal protective equipment (PPE) are used.

EHPs to monitor that the following precautions are taken to ensure that appropriate work practices are used to prevent direct contact with infectious material.

### 2) Handling of human remains in mortuaries/ funeral undertaker

The act of moving a recently deceased patient onto a hospital trolley for transportation to the mortuary might be sufficient to expel small amounts of air from the lungs and thereby present a minor risk;

- a) A body bag should be used for transferring the body to the mortuary and those handling the body at this point should use full personal protective equipment (PPE);
- b) The outer surface of the body bag should be decontaminated immediately before the body bag leaves the ward or anteroom area. This may require at least 2 individuals wearing such protective clothing, in order to manage this process;
- c) The trolley carrying the body must be disinfected prior to leaving the ward or anteroom;
- d) Prior to leaving the ward or anteroom, the staff members must remove their PPE;
- e) Once in the hospital or private mortuary, it would be acceptable to open the body bag for family viewing only (mortuary attendant to wear full PPE). Family to be provided with mask and gloves for the viewing and should not kiss the body;



- f) Washing or preparing the body is acceptable if those carrying out the task wear PPE. Mortuary staff and funeral directors must be advised by the Environmental Health Practitioner of the biohazard risk;
- g) Washing of the human remains can only be performed at the mortuary/ funeral undertaker's premises, no washing is allowed out of the mortuary/ funeral undertaker's premises.
- h) If the family wishes to dress the human remains, they may do so at the funeral undertaker's premises prior to the body being placed in the body bag.
- i) If a post mortem is required safe working techniques (for example manual rather than power tools) should be used and full PPE worn;
- j) The embalming is not recommended to avoid excessive manipulation of the body, however, if embalming is undertaken, the embalmer should wear full PPE;
- k) After use, empty body bags should be treated or disposed of as health care risk waste;

### **3) Measures when a patient passes on at home**

- a) If a COVID-19 patient dies at home, family members may not at any stage handle the body, a funeral undertaker must be called immediately.
- b) The belongings of the deceased person should be handled with gloves and cleaned with a detergent followed by disinfection with a solution of at least 70% ethanol or 0.1% (1000 ppm) bleach;
- c) 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, and the linens soaked in 0.05% chlorine for approximately 30 minutes. Finally, the laundry should be rinsed with clean water and the linens allowed to dry fully in sunlight.

### **4) Viewing of human remains**

- d) If the family wishes to view the body, they may do so without touching it, using standard precautions at all times including hand hygiene.
- e) Family members 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 (at least 1 m between people).
- f) People with respiratory symptoms should not participate in the viewing or at least wear a medical mask to prevent contamination of the place and further transmission of the disease to others;
- g) Adults >60 years and immunosuppressed persons should not directly interact with the body.

### **5) Environmental cleaning and control**



- a) Human coronaviruses can remain infectious on surfaces for up to 9 days, therefore cleaning the environment is paramount.
- b) The mortuary must be kept clean and properly ventilated and illuminated at all times;
- c) Surfaces and instruments should be made of materials that can be easily disinfected as prescribed in Regulations Relating to the Management of Human Remains, Regulation No. R. 363 of 22 May 2013 as framed in terms of the National Health Act, 2003 (act No. 61 of 2003).
- d) Environmental surfaces, where the body was prepared, should first be cleaned with soap and water, or a commercially prepared detergent solution; after cleaning, a disinfectant with a minimum concentration of 0.1% (1000 ppm) sodium hypochlorite (bleach), or 70% ethanol should be used to disinfect.

## 6) Conveyance of infectious human remains

- a) The human remains of a person who, at the time of his or her death suffered from a disease or condition which is capable of transmitting an illness even after death and in the opinion of the health authority concerned, may pose a health hazard or endanger public health in one way or another, may not be conveyed in public in any way unless-
  - i) such human remains are placed in a polythene bag, sealed in an airtight container, placed in a sturdy non-transparent sealed coffin, embalmed and/or the total surface of the body covered with a 5 cm layer of wood sawdust or other absorbent material which is treated with a disinfectant;
  - ii) a medical practitioner declares in writing that in his or her opinion the conveyance of such human remains will not constitute a health hazard;
- b) No person other than an attending medical practitioner or attending forensic pathologist or a medical practitioner who can prove that they have treated the deceased during illness may certify that the person did not die of an infectious disease;
  - i) such declaration must accompany the human remains at all times during the conveyance and up to the burial; and
  - ii) The declaration referred to in sub-section (a) above shall be shown to an EHP on demand by the person responsible for the conveyance of the human remains;
  - iii) No person shall damage a container referred to in sub-section (3)(a), or open such container or remove the human remains from the container or come into direct contact with the human remains after it has been sealed without prior approval from an EHP.

## 7) Disposal of Human Remains

Considerations should be made to respond to different situations differently as it arises and guided by the state of conditions at the time in the country. These guidelines may be varied based on new developments or information becoming available.

The Guidelines on disposal of human remains should also be implemented to issue directions to funerals during a country lockdown situations.

- a) Cremation is highly recommended where a human remain has passed on due to COVID -19.



- b) Burials and/or cremation of the human remain that died of an infectious disease is carried out as prescribed in the Regulations Relating to the Management of Human Remains, Regulation No. R. 363 of 22 May 2013 as framed in terms of the National Health Act, 2003 (act No. 61 of 2003).
- c) Burial services should not exceed 2 hours to minimise possible exposure.
- d) Only close family members should attend funeral services of persons that died of COVID-19 or other infectious diseases.
- e) Community members can attend funeral services if family members cannot manage to bury on their own.
- f) During lockdown conditions, only immediate family members should attend funerals.
- g) Those tasked with placing the body in the grave, on the funeral pyre, etc. should wear gloves and wash hands with soap and water once the burial is complete;

#### **8) Disposal of Human Remains in Medium Risk Situation**

Where the COVID-19 outbreak in the country is deemed a national state of emergency and the death rate is considered to be high.

- a) The keeping of human remains should be limited to three days where the number of deaths are high.
- b) The provisions in sub-section 4) will apply.
- c) Government may intervene if the human remains are not claimed within three days without following the normal procedures.
- d) Machinery (for digging and closing of graves) can be used if deemed fit to prevent further spread of the virus.

#### **9) Disposal of Human Remains High Risk Situation**

Where the COVID-19 outbreak in the country is deemed a national state of emergency and the death rate is considered to be high and mass funerals are provided as an option.

- a) The keeping of human remains will have to be reduced to a maximum of two days.
- b) Government may have to intervene where human remains are not claimed within two (2) days.
- c) Government may take over burial of human remains deaths exceed 10 or 20 per day per town.
- d) Machinery (for digging and closing of graves) can be used if deemed fit to prevent further spread of the virus.



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