

SOP FOR SAFE AND DIGNIFIED MANAGEMENT OF DEAD BODY OF SUSPECTED OR CONFIRMED COVID-19 CASE

Introduction

COVID-19 is an infectious disease with proven transmission from person to person. Transmission occurs from close contact through infectious materials like respiratory droplets, fecal excretion and oral secretions. Therefore, safe management of dead body as per the approved standard operating procedure is critical for preventing further transmission of the infection and associated consequences.

The cremation process is associated with emotions and is a sensitive issue. It should be handled with sensitivity and respect. Therefore, before any procedure, the family must be informed and fully explained about the nature of the disease, risk of infection, cremation processes, taking into consideration their religious and cultural values and obtain a formal consent from the family.

Scope

This SOP is for the management of dead body and human remains from death due to suspected or confirmed COVID-19 case and must be used by trained personnel.

Objectives

1. To prevent infection;
2. To provide dignified cremation/burial of the dead body

Team composition for handling the dead body

There should be a minimum of 5 trained people (physically able) in the team comprising of:

1. First team of two for packing dead body (full PPE) and decontamination of rooms/sites;
2. Second team of two to help manage the cremation (basic PPE);
3. Health Officer to manage the family members and oversee infection control;

Family members should be discouraged to handle the body. However, if they wish, they should be provided proper instruction and allowed to handle in full PPE. Religious representatives shall be allowed to join family members for performing prayers.

Step 1: Prepare disinfectants

Disinfectant solutions must be prepared on the same day

1. 0.5% Bleaching (chlorine) solution for disinfection of object and surfaces

Step 2: Collect necessary equipment/materials

Body bag

1. Two impermeable plastic bags
2. One cloth bag (opaque)
3. The bag should be able to hold 80 -120 kilos

Materials to prevent infections

Hand hygiene

1. Alcohol-based hand rub solution (recommended) **OR**
2. Clean running water, soap and towels (recommended) **OR**

Equipment

1. Stretcher
2. One hand sanitizer (alcohol hand-rub/spray)
3. One back/power sprayer (2% Glutaraldehyde/0.5% chlorine solution)
4. Leak-proof and puncture resistant sharps container (sharp box)
5. Two leak-proof infectious waste bags: one for disposable material (destruction) and one for reusable materials (disinfection)

Personal Protective Equipment (PPE)

1. Disposable gloves (non-sterile)
2. Heavy duty gloves
3. Disposable coverall suit
4. Face protection: goggles/face shield
5. N95 mask
6. Footwear:
 - Gumboots
 - Shoe cover

Step 3: Coordination with family members and site management

1. The health officer and the teams will greet the family members and offer condolences;

2. The health officer will meet with family members and explain the nature of disease, risk of infection and associated problems;
3. The health officer should ensure that the family members understood that the disease poses high risk to public health and only the medical team is allowed to handle the dead body;
4. The health officer must ensure that the family members and relatives have understood these procedures;
5. The health officer and the religious representative will work together with the family members to ensure that the cremation is carried out in a safe and dignified way;
6. Obtain the formal consent of the family's representative before proceeding with the cremation;
7. Identify the family members who will be participating in the cremation rituals;
8. The health officer will verify and ensure that the cremation site is in place. If this is not the case, send selected people to do so at the crematory identified by the family;
9. Allow the family members to take pictures of the preparation and cremation;
10. Identify the rooms and annexes (bathroom, toilet) that were used by the deceased as they need to be cleaned and disinfected;

Step 4: Donning of Personal Protective Equipment (PPE)

Follow Infection and Waste Management Guideline 2018 (Annexure 1)

Step 5: Placement of body in the body bag

1. The first team enter the room, assess the environment, open windows, doors to allow optimal ventilation and light;
2. Do not remove any clothing of the deceased
3. Spray body cloth of the deceased with appropriate disinfectant sparing the face;
4. Gently roll the body wrapped in the bed sheets while sliding first unzipped bag under the dead body;
7. Roll the body towards and into the bag, adjust the body, minimize air, zip-up, and disinfect the bag using spray;
8. Disinfect gloved hands using hand rub. If any areas of PPE have visible contamination, disinfect with an appropriate disinfectant spray;
9. Unzip and place the second bag (plastic) alongside the first loaded bag, roll gently the first loaded bag over the second bag, reduce air inside the bag, zip up, disinfect;
10. Place the stretcher near the packed body;

11. Unzip and place the third bag (cloth) on the stretcher, lift the packed dead body and place it over the third bag;
12. Place clothes and/or objects of the deceased inside the third bag (cloth) after disinfecting with appropriate disinfectant;
13. Zip-up and disinfect the surface of the third bag;
14. Disinfect gloved hands using hand rub;
15. Carry/wheel the stretcher, gently place the dead body on the rear of the pickup vehicle by placing the head towards the front;
16. This should be performed by 2 staff donned in PPE;
17. The first team should hand over the dead body to second team at the door of the room where death has occurred.
18. The second team will load the dead body onto the pickup vehicle and proceed to the crematorium. The second team should have basic PPE
19. The first team with PPE on will carry out the decontamination of the sites as necessary;

Note:

Respect and give the grieving/praying time to family members

Handling of the body should be minimal

Step 6. Decontamination of the site (done by first team) - use full PPE

1. Collection of used objects, cleaning and disinfection of the environment (rooms, house), and burning as necessary;
2. Collect sharps and dispose them in a leak-proof and puncture resistant container (sharp box);
3. Special focus should be given to areas soiled by blood, nasal secretions, sputum, urine, stool and vomit;
4. Clean with water and detergent all objects (e.g. dishes) possibly infected by the deceased; then disinfect with a chlorine solution 0.5%;
5. Collect any belongings of the deceased left behind, in a biohazard bag (double bag), ensure the bag is tightly closed and disinfected, and incinerated;
6. Disinfection or incineration is done as per the National Guideline on Infection Control and Medical Waste Management 2018;

Step 7: At the crematorium

The dead body arriving at crematorium is triple packed with complete disinfection and poses minimum risk of infection. Therefore, handling of dead body requires only basic PPE (gloves and mask).

At the crematorium, the following steps are followed:

1. Wear gloves and mask, unload the dead body and transport to the funeral pyre (arranged for the space of full stretched body);
2. Do not open the body bag
3. Place the dead body on the funeral pyre/incinerator as it is
4. Allow the family members to witness and offer prayers;
5. Provide adequate time to perform funeral ritual;
6. Family members will be allowed to light the funeral pyre/incinerator, if they wish to do so. They should wear face mask;
7. While the dead body is being consumed by fire, ensure minimum handling of the dead body (such as stabbing and puncturing of the body with sharp objects to facilitate quick burning) is ensured;

Step 8: Doffing of PPE

Follow Infection and Waste Management Guideline 2018

Step 9: Dispose ashes and remains

1. Collect and dispose ash as per the local custom;

Step 10: Before returning home or health center

1. Perform personal hygiene (washing hands, bathing, light incense and cleansing);
2. Disinfect the pick-up vehicle with appropriate disinfectant;
3. Thank family members for their cooperation;
4. Thank the religious representative for his service;

References

1. Guidance for Safe Handling of Human Remains in U.S. Hospitals and Mortuaries. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute of Occupational Safety and Health. <http://www.cdc.gov/vhf/ebola/healthcare-us/hospitals/handling-human-remains.html>
2. How to conduct safe and dignified burial of a patient who has died from suspected or confirmed Ebola or Marburg virus disease. Interim Guidance, WHO/EVD/GUIDANCE/Burials/14.2Rev1 (2017)