



National Ebola Training
& Education Center

Care of the Deceased

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[CDC](#) > [Ebola \(Ebola Virus Disease\)](#) > [U.S. Healthcare Workers and Settings](#) > [Hospitals](#)

Guidance for Safe Handling of Human Remains of Ebola Patients in U. S. Hospitals and Mortuaries




Language: English ▼

Page Summary

Who this is for: Personnel who perform postmortem care in U.S. hospitals and mortuaries.

What this is for: To protect against the postmortem spread of Ebola infection at the site of death, prior to transport, during transport, at the mortuary, and during final disposition of remains

How to use: To guide staff in the safe handling of human remains that may contain Ebola virus by properly using personal protective equipment (PPE) and following decontamination measures at every step of the process. See CDC's [Mortuary Guidance Job Aid](#)  (1 page) for more information on postmortem preparation in a hospital room.

Summary of Recent Changes

Revisions were made on January 20, 2015, to reflect the following:

- The term "hermetically sealed casket" was replaced with a recommendation to use a metal casket based on common practices in the industry.
- Additional details have been added about equipment needed for workers handling remains and step-by-step guidelines for postmortem preparation and transportation of remains.
- Additional resources have been added on personal protective equipment (PPE), decontamination, infection control, transportation of remains, and burial and cremation practices.



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Deceased Patient Management

Key Points:

- Partner with your local and State public health department.
- Know your State regulations regarding
- Ebola virus can be transmitted in postmortem care settings.
- Only personnel who are trained in handling infected human remains and wearing recommended PPE touch or move any remains that contain Ebola virus.
- Do not wash or clean the body.
- Do not embalm the body.
- It is preferred that no autopsy be performed but, if an autopsy is necessary, consult your State health department and CDC regarding necessary precautions.
- Do not remove any inserted medical devices from the body such as intravenous (IV) lines, endotracheal (ET) or other tubing, or implanted electronic medical devices.
- Do not remove any wound dressings or other treatment items.

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Deceased Patient Management

Key Points (cont):

- Cremation is preferred but if cremation is not an option because of safety concerns, the body should be buried in a standard metal casket or other comparable burial method.
- Take a photo of the patient for identification purposes.
- Partner with your local and State public health department.
- Visitation of patient remains can be facilitated through a video link .
- Do not allow direct access to remains .
- Make counseling services available to family.
- Complete all necessary documentation prior to removal of patient remains to comply with hospital and state and local health department regulations.
- Have pre-existing MOU with a crematory and funeral director for cremation services after receipt of permission from family and the local health department.

Deceased Patient Management

Mortuary Guidance Job Aid:
Postmortem Preparation in a
Hospital provides Step by Step
Instructions on the postmortem
care in a hospital room



Mortuary Guidance Job Aid: Postmortem Preparation In a Hospital Room

Appropriate personal protective equipment (PPE) must be worn while performing these tasks.

1. Turn on thermal sealer.
2. Use digital camera or mobile phone to take a photograph of the deceased's face. Send photo via Wi-Fi, e-mail, or text message to site manager through secure means. Decontaminate or properly discard camera or mobile phone.
3. Position gurney with three pre-opened body bags next to hospital bed.
4. Pull bed sheet(s) up and around body. Do not wash or clean body. Do not remove inserted medical equipment from body.
5. Remove first bag from gurney. Gently roll body wrapped in sheets while sliding first bag under body.
6. Complete transfer of body to first bag. Zip up bag. Minimize air in bag.
7. Disinfect gloved hands using alcohol-based hand rub (ABHR). If any areas of PPE have visible contamination, disinfect with an EPA-registered disinfectant wipe.
8. Disinfect outside of first bag with an EPA-registered hospital disinfectant.
9. Transfer first bag with body to gurney, placing it on top of second bag.
10. Disinfect gloved hands using ABHR.
11. Fold second bag around first bag and heat seal approximately 2" from edges. Remove air from second bag. Heat seal bag again approximately 1" below initial seal and heat seal diagonally across corners. Use scissors to trim off any excess material along seam. Turn off or unplug thermal sealer. Decontaminate thermal sealer before it is removed from hot zone or reused.
12. Disinfect outside of second bag with EPA-registered hospital disinfectant.
13. Disinfect gloved hands using ABHR.
14. Work third bag around second bag. Zip up third bag. Zip tie the zipper shut.
15. Disinfect gloved hands using ABHR.
16. Wheel gurney to decontamination area.
17. Decontaminate surface of body bag with EPA-registered hospital disinfectant.
 - Begin by applying the hospital disinfectant to top of bag and any exposed areas of gurney's cot.
 - Roll bag to one side to decontaminate half of bottom of bag and newly exposed portion of gurney's cot.
 - Repeat with other side of bag and gurney.
 - After visible soil has been removed with EPA-registered disinfectant wipe, reapply EPA-registered hospital disinfectant and allow sufficient contact time, as specified by manufacturer.
18. Disinfect surfaces of gurney from handles to wheels with an EPA-registered hospital disinfectant.
19. Disinfect gloved hands using ABHR.
20. Push gurney so only gurney and decontaminated body bag enter cold zone. Do not enter cold zone. A new set of workers will receive the body.
21. Proceed to PPE removal area.

For more information: Guidance for Safe Handling of Human Remains in U.S. Hospitals and Mortuaries.
<http://www.cdc.gov/vhf/ebola/healthcare-us/hospitals/handling-human-remains.html>



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Equipment Required

Appropriate PPE

Hospital Cart

3 Mortuary Bags

Thermal Sealer

Scissors

Camera

Hand Sanitizer

Medical Waste Bags

Zip Tie for locking the final mortuary bag

Mortuary Bag Specifications

Bag 1:

6 mil thick with factory sealed seams (heat or welded). Must be impervious to fluids with the zipper on top.

Bag 2:

chlorine-free heat sealable material that can be heat-sealed around the body to form a leak-proof body bag.

Bag 3:

Final layer. This must be laminated vinyl or other chlorine-free material, minimum of 18 mil thickness

Handles should be riveted on, not sewn and reinforced with handle straps that run under the pouch.

Must be impervious to fluids.

Zipper on top.

Deceased Patient Management

Equipment: Bio Seal, Mortuary Bags



Deceased Patient Management



Sealing the Bioseal:

Don't rush

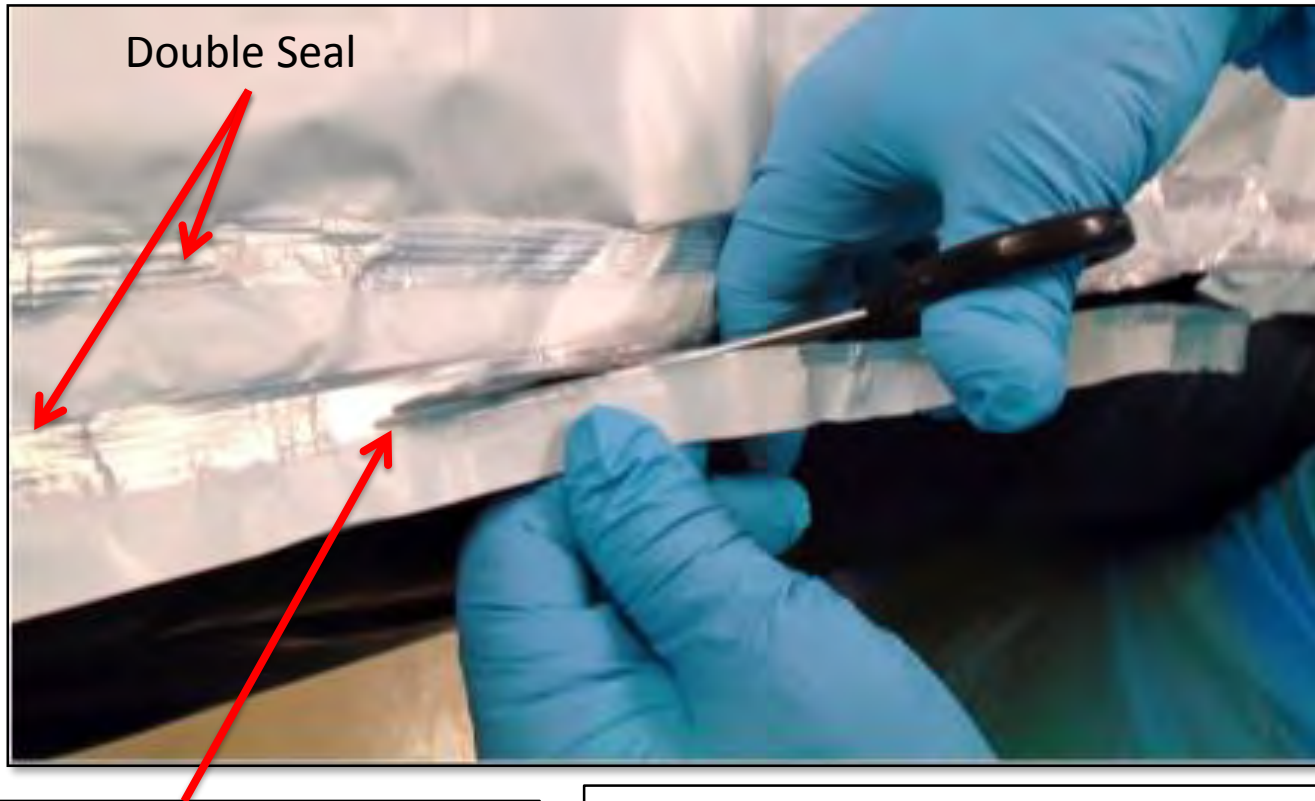
Work as a team

Be cautious of the hot wand

Sealed Bioseal material is hot

Bioseal edges can be sharp

Deceased Patient Management



Cutting through the outer seal removes excess material and the possibility of contamination under the flaps.

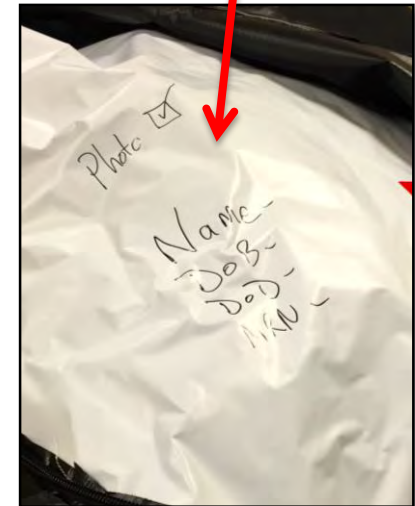
Remove outer gloves and perform hand hygiene on middle layer before applying a clean pair of outer gloves often.
Clean all surfaces with bleach wipes and allow to dry.

Deceased Patient Management

Transferring from the care room to the mortuary bag



Write information
on the bioseal with
permanent marker



Create a bridge between the care bed and the cart with a slider board: the bed and cart do not touch

Once the sealed remains are transferred onto the cart, pull the slider board into the care room.



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Transportation of Human Remains

- Persons handling the remains should wear single-use (disposable) gloves with extended cuffs and a long-sleeved disposable gown.
- Minimize transportation of remains that contain Ebola virus to the extent possible.
- Coordinate all transportation, including local transport for mortuary care or burial, with relevant local and state authorities in advance.
- Coordinate interstate transport with CDC by calling the Emergency Operations Center at (770) 488-7100.
- Avoid transporting non-cremated remains via aircraft.
- Human remains transported for interment, cremation, or medical research at a college, hospital, or laboratory are excepted from the U.S. Department of Transportation's Hazardous Materials Regulations (49 C.F.R., Parts 171-180). See §173.134(b)(14).

<http://www.cdc.gov/vhf/ebola/healthcare-us/hospitals/handling-human-remains.html>



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Deceased Patient Management

Treat your patient with Respect and Dignity

Remember to care for your patient's loved ones

And

Your Staff



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Questions?



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Resources

- NETEC: <http://netec.org/>
- (<http://www.cdc.gov/vhf/ebola/healthcare-us/hospitals/handling-human-remains.html>)
- Jelden KC, Gibbs SG, Smith PW, et al. Nebraska Biocontainment Unit Patient Discharge and Environmental Decontamination after Ebola Care. *American Journal of Infection Control*. 43 (2015) 203-5.

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