



**POLICIES AND PROCEDURES MANUAL**

System       Department

**Supersedes:**

Section: The Nebraska Biocontainment Unit (NBU)  
NBU Waste Removal Process, Categories A and B  
Subject: B  
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Attachments:  
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**Nebraska Biocontainment Unit (NBU)  
Waste Removal Process (Categories A and B)**

**Policy:**

The Nebraska Biocontainment Unit (NBU) shall treat all waste as biohazard waste.

NBU waste generated during activations shall either go through the autoclave or non-autoclave process as determined by the Waste Procedure Algorithm.

**PURPOSE:**

To provide guidance for removing waste items from the NBU.

**Equipment:**

PPE as instructed by the NBU medical director

Autoclave bags

Small waste container

Large waste container

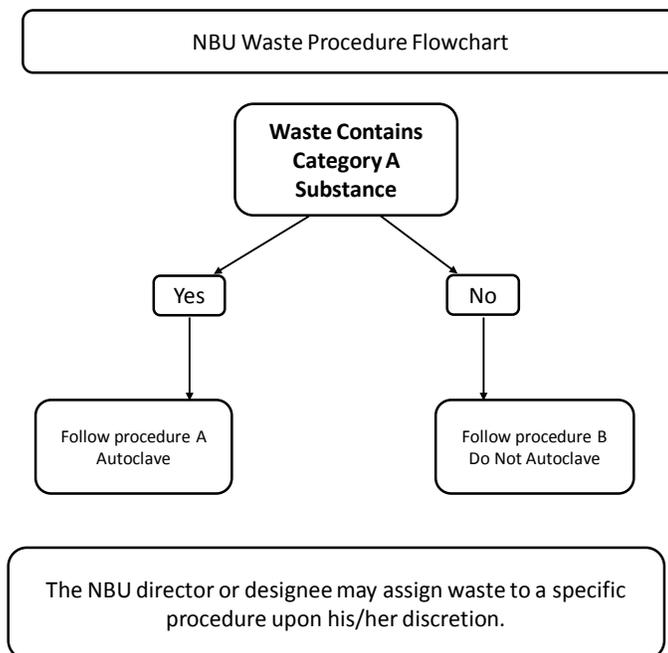
Warm-side red bin on wheels

Clean-side red bin on wheels

**General Rules Regarding NBU Waste:**

- All waste from the NBU shall be determined to be category A or B by the NBU director or designee.
- Category A waste shall be inactivated by autoclave prior to leaving the NBU.
- Category B waste shall follow the Nebraska Medicine Waste Handling Policy **ENVIRONMENT OF CARE EC10**
- Upon activation of the NBU, Environmental Services (EVS) shall be notified to initiate their procedures for processing NBU waste.
- NBU waste shall follow one of two procedures based on the patient disease diagnosis or the NBU Medical Director or designee instructions.
  - **Procedure A. Autoclave** requires all waste be autoclaved prior to leaving the NBU
  - **Procedure B Non-Autoclave** does not require waste be autoclaved prior to leaving the NBU.

- Follow the NBU Waste Algorithm (figure 1) to determine which procedure to follow.
- All waste shall be contained in disposable autoclave bags that are tear-resistant, leak-proof, and secured to prevent leakage or expulsion of solid or liquid waste during storage, handling or transport.
- Sharps are to be placed in an approved sharps container prior to being placed into an autoclave bag.
  - When the sharp containers are no more than ¾ full, it shall be placed into an autoclave bag keeping the sharps container upright.
  - The locking mechanism shall not be activated as the sharps container must remain open to allow steam penetration during autoclaving.



**Figure 1**

**Procedures for NBU waste:**

Procedure	Process
<b>A. Autoclave</b>	<p><b>Guidelines:</b></p> <ol style="list-style-type: none"> <li>1. Liquid containers must be <b>no more</b> than half full, as overfilled containers may result in boil over and spillage.</li> <li>2. Liquid containers that have caps/ lids must have the, loosened or if they contain vented closures the vents must be unobstructed to allow steam to escape i.e. suction canisters as closed and non-vented items have the potential to EXPLODE in the autoclave.</li> <li>3. Do not place sharps directly into an autoclave bag as they as although they are tear resistant, they can be punctured or may burst in the autoclave.</li> <li>4. Place autoclave bagged items in an autoclave safe rigid container (autoclave pan) during autoclaving to contain potential spills.</li> </ol>

5. Since autoclave bags are impermeable to steam, the bags should not be tightly twisted or completely sealed, but gathered loosely at the top and secured with autoclave tape to create an opening through which steam can penetrate.
6. Waste containers within the Biocontainment Unit during activations that generate category A waste shall be lined with an autoclave bag.
7. Waste shall be removed from the trash can when they are no more than 3/4 full.
8. **Sharps containers** when removed from the locked mounting brackets shall be placed into an autoclave bag. The bag shall be closed by loosely twisting the neck and securing it with autoclave steam indicator tape.
  - a. Note: When a lab test returns a negative result for the admitting pathogen, the current sharps container shall be removed and exchanged for a new one.
9. Waste generated in the warm and clean zones within the NBU shall be staged and treated in the same manner as waste from the dirty area with the exception of double bagging.
10. **Follow NBU Policy 1263 Processing of Human Waste for instructions on human liquid waste.**

**Transferring Waste to the Staging Area from the hot zone:**

11. A staff member in the area in which the waste is generated shall notify the doffing partner to prepare to transfer waste to the waste holding area.
12. The doffing partner shall:
  - a. Line a larger trash can than what is used in the patient room with a clean autoclave bag.
  - b. Place the trash can directly outside the door of the patient care room.
  - c. Indicate to the provider in the patient care room when they are ready for them to pass the waste out.
13. The provider in the patient care room shall:
  - a. Remove the bag from the trash can by holding the bag by two adjacent corners and rotating them to gather the neck of the bag in a way that will allow the provider to grasp the bag and lift it out of the trash while holding the bag closed.
  - b. Secure the neck of the bag by taping it with autoclave steam indicator tape in a spiral method.
    - i. **Do not** tightly twist the neck of the bag.
    - ii. **Do not** completely close the bag as there must be an opening to allow autoclave steam to penetrate the waste.
    - iii. **Do not** expel trapped air from the bag.
  - c. The bag may then be passed out of the room, and placed directly into the prepared 2<sup>nd</sup> autoclave bag that has been placed within the larger trash container.

- d. Once the waste has been placed in the 2<sup>nd</sup> autoclave bag the doffing partner shall hold the bag by two adjacent corners and rotate them to gather the neck of the 2<sup>nd</sup> bag to fully enclose the bagged waste.
- e. Place a metal binder clip around the neck to secure the bag closed.
- f. Transfer the double bagged waste immediately to the red bin then roll the red bin to the designated staging area.
- g. Remove double bagged waste from the red bin and place in the designated waste staging cart.
  - i. When moving bag(s) of waste keep them at arm's length to prevent exerting pressure on the bags that can result in forcing contaminated air from inside the bag.

**Process for Transferring Waste to the Autoclave for Inactivation**

**This process involves the Autoclave Operator, Tasker and Doffing Partner.**

**Communication and Transferring Waste:**

1. The autoclave operator shall prepare the autoclave(s) and determine when they are ready to receive waste.
2. The autoclave operator shall notify the tasker to call the hallway phone (9-1782) to alert the doffing partner to transfer waste.
3. The doffing partner shall:
  - a) Position the warm-side transport container with the lid off, outside the designated waste holding room door.
  - b) Enter the waste holding room and take only the item(s) that will be autoclaved immediately from the waste staging carts.
  - c) Gently place the bagged item(s) into the container, change gloves and replace the lid
  - d) Wheel the container to the door separating the clean and warm zones.
4. The Tasker shall ensure the autoclave operator is ready to get into position to receive the items before opening the left door and locking it into an open position.
5. The Tasker shall walk away from the door to observe and wait for the transfer to conclude and the autoclave operator to leave the area before moving back to close the door.
6. The autoclave operator shall move towards the threshold of the open door with the clean-side transfer container.
7. The autoclave operator shall remove and hold the lid of the clean-side transfer container.
8. The doffing partner shall inform the autoclave operator on what type of waste is being transported (solid waste, liquid waste, linens).

	<p>9. The doffing partner shall remove the lid of the warm-side transfer container, remove the bagged waste and gently place it into the clean-side transfer container.</p> <p>10. Simultaneously, the autoclave operator shall replace the lid of the clean-side container and the Doffing Partner shall replace the lid to the warm-side container.</p> <p>11. The Doffing Partner shall take the warm-side container to the designated storage area and wipe the external surfaces with bleach wipes.</p> <p>12. The autoclave operator shall wheel the clean-side container to the autoclave room.</p> <p><b>At the autoclave room</b></p> <p>1. The autoclave operator shall open the clean-side container to remove the waste and place it immediately into the autoclave and close the autoclave door.</p> <p>2. Replace the lid to the container and wipe all external surfaces with bleach wipes.</p> <p>3. Set the container in the designated area until it is required for the next load.</p> <p>4. <b>Follow NBU Policy <u>1025 Autoclave Policy</u></b> for instructions on how to safely operate the autoclave.</p>
<p><b>A. Non-autoclave</b></p>	<p>NBU waste from the care of a patient that results in the generation of Category B waste shall be permitted to leave the NBU without being autoclaved and may follow the normal Nebraska Medicine waste handling procedure: policy <b>ENVIRONMENT OF CARE EC10</b></p>
<p><b>Staff Accountability:</b>          Nebraska Biocontainment Unit Leadership          Policy and Procedure Workgroup          Infection Control Department</p>	

<p><b>Department Approval</b>          Signed   s  : Kate Boulter          Title: Manager          Department: NBU</p>	<p><b>Administrative Approval</b>          Signed   s  : Michele Schwedhelm          Title: Executive Director</p>
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