



PPE Donning and Doffing

Ebola Patients

These are standard Nebraska Biocontainment Unit Personal Protective Equipment procedures. These are developed to protect against Category A agents. Therefore, they vary slightly from CDC recommendations.



Equipment and Supplies

- Surgical Gown
- Surgical Cap/Hair Cover
- Face Shield
- Standard Patient Gloves
- Doffing Pad (Large Fluid Repellent Fabric or Plastic Drape)
- Surgical Boot Covers
- N95 Respirator
- Long Cuff Nitrile Gloves
- Trash Receptacle
- Hand Sanitizer
- Bleach wipes
- Duct Tape
- Surgical Mask



****Please work with your vendors for material replacements for above items****

Pre- Donning Activities

- Perform hand hygiene immediately prior to putting on gloves
- Apply scrubs and plastic washable footwear (such as Crocs)
- Remove all jewelry
- Take and record temperature
- Hydrate

DONNING Biological PPE



- Apply boot covers
- Apply surgical cap (Be sure to cover ears for additional protection. Head covers that cover more of neck and tie at the lower rear neck have been used at UNMC. It is worn under the gown.)
- Apply surgical gown (All ties should be properly secured with a simple bow. You may not want too tight of a fit as you will need bending room. A donning partner may be needed at this step as it is difficult to tie behind your back.)
- Perform hand hygiene
- Apply N95 respirator
- Seal mask to the face ensuring straps are not crossed and properly located at the crown of the head and base of the neck
- Perform a fit check of the respirator, breathing deeply in and out, feeling with your hands for any air leakage. (The fit check step is not necessary for Ebola as it is not an airborne disease.)

DONNING Biological PPE Continued

- Apply face shield (Over surgical cap and N95 straps. Ensure face shield and head cover overlap to protect the forehead.)
- Perform hand hygiene
- Apply standard patient care gloves. Bring cuffs of gown over the patient care glove cuff.
- Apply long cuff nitrile gloves over the standard patient care gloves. Make sure that the glove cuff covers the gown sleeve adequately to prevent exposure when providing patient care.
- To prevent the glove from rolling down tape the glove to the gown sleeve making sure to fold down a small edge of the end of the tape (for easier removal during doffing).
- NOTE AFTER IN ROOM: A third set of gloves is used during patient care/touch. After patient care/touch is completed, the 3rd set of gloves is removed and the nitrile gloves are wiped with a bleach wipe. Remove the 3rd pair of patient care gloves in the patient care area.





DOFFING Biological PPE Ebola patients



- NOTE: Doffing partner wears same PPE as doffer and pays attention to hand hygiene
- Bleach wipe the long cuff nitrile gloves **before** opening the door to the patient room.
- Step out of room onto the doffing pad with trash receptacle, hand sanitizer and bleach wipes nearby and a supply of additional clean standard patient care gloves and surgical masks. The doffing pad is marked off into section 1 and section 2. When leaving room, step onto section 1.
- While standing in section 1 of the doffing pad, if you taped the gloves to the gown, the doffing partner shall remove the tape gently and discard it before you remove the purple gloves.
- Remove the long cuff nitrile gloves using glove-in-glove technique and discard them in the trash (if inner standard patient care gloves are accidentally removed during the doffing of the nitrile gloves, apply a new clean pair of gloves).



Doffing Biological PPE – Ebola patients Continued

- Begin gently removing the gown. Ties should be untied (by doffing partner), rather than torn and the gown should be gently rolled forward over shoulders, by a doffing partner to reduce aerosolization.
- Keep clean gown sleeves over your gloved hands as much as possible to prevent contamination of the gloved fingers as you gather the gown, keeping the dirty surfaces to the inside, rolling it up gently
- Discard in trash
- Remove the leg/boot covers one at a time. Roll the dirty side in as you remove them if possible, being very mindful of where the dirty side may come in contact with things around you. (This should be done by the doffing partner. After being in the room for 4 hours, bending over sometimes leads to dizziness.)
- Step onto section 2 of the doffing pad as your boots are removed. The doffing partner will discard covers in the trash. Do not step onto section 1 again.



Doffing Biological PPE – Ebola patients Continued

- Remove the inner standard patient care gloves using glove-in-glove technique and place them in the trash
- Perform hand hygiene, but do not leave the doffing pad (use hand sanitizer pumped from a squirt bottle from doffing partner)
- Apply new clean gloves (handed over by doffing partner) from the doffing pad
- Remove the face shield. Grab the rear strap and pull it over the head forward, gently allowing the face shield to fall forward. You may want to untie the head cover prior to this step as it may come off with the face shield. Holding the lower corner of the N95 respirator firmly, but exposing as little of your gloved hand as possible to its dirty surface, remove each strap of the N95 respirator over the head. (It has been found to be easier to do this all in one step rather than two steps.)
- Gently place the face shield/ N95 respirator in the trash.
- Doffing partner will untie the head and neck cover and instruct you to remove it carefully.
- Place head and neck cover (or surgical head cover) in trash.



Doffing Biological PPE – Ebola patients Continued

- The doffing partner will wipe the top sides and bottom of each shoe with bleach wipes.
- As each shoe is cleaned, step off the doffing pad onto the floor. The doffing partner will gather it up carefully rolling the dirty surface inward.
- Place rolled doffing pad in trash receptacle.
- Remove the standard patient care gloves using glove-in-glove technique.
- Place gloves in trash.
- Perform hand hygiene
- Proceed to shower.
- Monitor temperatures for at least 21 days.
- Rehydrate in another non-patient care area.

***This information was developed in consultation with the Nebraska Biocontainment Unit and Healthcare and Emergency Responder Organization Education through Simulation (HEROES). More information can be found at www.unmcheroes.org or <http://www.nebraskamed.com/biocontainment-unit>.**