Personal Protective Equipment (PPE) for Handling Infectious Agents: (Non-Health Care)

Ebola and other viral hemorrhagic fevers can spread through direct contact with blood or body fluids (such as saliva or urine) of an infected person or by objects contaminated with the blood or body fluids of an infected person. Prevent directly touching infected materials by properly wearing the recommended personal protective equipment (PPE). It is important to help protect you, and all pieces of PPE should be worn properly throughout your period of potential exposure. PPE is not required during routine cleaning and other activities.

While you are cleaning areas that might have been contaminated with body fluids that came from someone who might have been infected with Ebola, you should wear two pairs of waterproof disposable gloves, long-sleeved waterproof gown, face mask, and eye protection such as face shield (preferred) or goggles. You should also wear close-toed shoes with booties (shoe coverings).

<table>
<thead>
<tr>
<th>Put on your PPE in the following order:</th>
<th>Take off PPE in the following order:</th>
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<tbody>
<tr>
<td><strong>1. Booties (if necessary)</strong></td>
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<tr>
<td>• Pull booties on over your shoes</td>
<td>• Remove booties; discard*</td>
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<tr>
<td><strong>2. First pair of gloves (inner glove)</strong></td>
<td><strong>2. Outer gloves</strong></td>
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<tr>
<td>• Insert hands into gloves</td>
<td>• Grasp outside of one glove with other gloved hand and peel off</td>
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<tr>
<td>• Extend to cover wrists</td>
<td>• Hold removed glove in the hand that is still double gloved</td>
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Once you put your PPE on, the outside of each item is considered potentially contaminated with material that could transmit infection. To prevent contaminating yourself, you must put on and take off PPE in the correct order and in the way described below.
### 3. Gown
- Put arms through the armholes; the opening goes in the back
- Fasten at the back at the neck and waist
- Gown should extend all the way around the body, overlapping in back; if gown does not reach around your body, use two gowns, the first tied in the front and the second tied in the back

### 3. Gown
- Unfasten ties at neck and waist
- Pull gown away from neck and shoulders, touching inside of gown only
- Turn gown inside out
- Fold or roll into a bundle; discard*

### 4. Face mask
- Place over nose, mouth, and chin
- Secure ties or elastic bands at middle of head and neck
- Pinch the flexible band to tighten over nose bridge
- Mask should fit snugly to face and below chin

### 4. Goggles or face shield
- Grasp on sides by head band or ear pieces; discard*

### 5. Face shield (preferred) or goggles
- If wearing face shield, position over face and secure on brow with headband
- If wearing goggles, position over eyes and secure to the head using the ear pieces or headband
- Adjust to fit comfortably

### 5. Face mask
- Untie the bottom and then the top tie; if mask has elastic bands, remove mask by pulling up bottom band first
- Remove from face without touching skin or clothes; discard*

- Slide a finger and thumb of the hand with single glove between the two gloves on the double-gloved hand at wrist (avoid touching the outside of outer glove with inner glove)
- Pinch and peel glove off from inside, turning glove inside out (over other glove), such that the two gloves are inside out and wrapped up inside each other in a single ball and creating a “bag” for both gloves; discard both gloves*
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**6. Second pair of gloves (outer glove)**
- Insert hands into gloves
- Extend to cover wrist of gown

**6. Inner Gloves**
- Grasp outside of glove with other gloved hand and peel off.
- Hold removed glove in the hand that is still gloved
- Slide ungloved clean finger and thumb under remaining glove at wrist
- Pinch and peel the second glove off from inside, creating a “bag” for both gloves; discard

**7. Wash hands**
- Wash hands with soap and water immediately after removing PPE, or alcohol-based hand rub if soap and water are unavailable

*After removal of PPE, collect and keep contaminated items in plastic bags until they are disposed of properly. Attach a BIOHAZARD warning label to the outside of the bag. If contaminated items are not dry, they should be placed in a leak-proof bag and double-bagged.

### Additional Do’s and Don’ts of wearing PPE

- **Do** change gloves if yours become torn or very dirty; wash hands before putting on new gloves.
- **Do** wash your hands thoroughly with soap and water or an alcohol-based hand rub after removing PPE. If hands appear dirty, use soap and water.
- **Do** limit the number of surfaces, items, and people you touch while wearing PPE to prevent contamination.
- **Don’t** touch your face or adjust your PPE with contaminated gloves
- **Don’t** wash or reuse disposable gloves
- If you are concerned that you may have been exposed to body fluids or other materials from an Ebola patient, stop working and immediately wash the affected skin surfaces with soap and water. Affected mucus membranes should be irrigated with copious amounts of water or eyewash solution. Notify your employer immediately.

### References:

The Centers for Disease Control and Prevention (CDC)- Guidance for Non-Health Care Setting  
[https://www.osha.gov/Publications/OSHA_FS-3756.pdf](https://www.osha.gov/Publications/OSHA_FS-3756.pdf)

The Centers for Disease Control and Prevention (CDC)- Guidance for Airline Cleaning Crews  