

Infection Prevention and Control (IPC) for Ebola or Marburg:

PPE Part 2 – Putting On and Taking Off PPE

Speaker's Notes and Script

Slide 1:

*Intended Audience: This presentation focuses on what **healthcare workers and facilities management staff** need to know to properly don (put on) and doff (take off) PPE for Ebola disease (Ebola) or Marburg virus disease (Marburg). See HCW Slide Deck 6: PPE Part 1 – When, Why, and what to Use for PPE for Ebola or Marburg for basic information on PPE and its importance.*

Please note that the training topics for IPC for Ebola or Marburg are presented in sequence, with the expectation that participants will progress through the series. You may, however, mix and match content to meet participant needs, and you may need to adjust the sample script below accordingly.

Script:

Welcome! Today we'll be focusing on how to correctly put on and take off personal protective equipment (also called PPE) when viral hemorrhagic fevers such as Ebola disease – or Ebola - and Marburg virus disease – or Marburg - are a threat in your area. This session builds on the PPE Part 1 presentation, where we talked about the basics of personal protective equipment and its importance.

Slide 2:

Script:

We have 3 learning objectives for today. By the end of today's session, you should be able to explain why putting on and taking off PPE carefully is important in the context of Ebola or Marburg. You should also be able to describe at least three considerations for putting on PPE correctly and at least three considerations for taking it off correctly in the context of Ebola or Marburg.

Slide 3:

Script:

As you may remember from the last session, PPE is an important part of the standard precautions that help protect you when you run the risk of exposure to Ebola or Marburg such as when you are dealing with a patient potentially ill with Ebola or Marburg or when disposing of waste that may include the blood or body fluids of ill patients.

Remember that Ebola and Marburg can spread through direct contact (such as through broken skin or mucous membranes in the eyes, nose, or mouth) with

blood or body fluids of a person who is sick with or has died of Ebola or Marburg or with objects contaminated with blood or body fluids from a person who is sick with or has died from Ebola or Marburg.

PPE works as a barrier to protect your eyes, nose, mouth, skin, and clothing from contact with a patient's blood or body fluid, and in this way, it helps protect you from infection. If you avoid getting infected, you help keep your co-workers, patients, family, and friends safe, so proper use of PPE is important.

Slide 4:

Activating background knowledge:

A key benefit of working with adult learners is that they likely already have some knowledge or experience related to the topic you are teaching. Activating background knowledge helps students connect new learning to what they already know and may help them understand new information better. It also helps you, the instructor, to identify gaps in knowledge where you may need to spend extra time or add emphasis while teaching. Use this slide as an opportunity to let students share what they already know.

Script:

Before we dig deeper into today's topic, let's look at a picture of someone using PPE, in this case, gloves and a face mask. Based on what you already know about PPE use, what recommendations would you give the man in the red shirt to help him better protect himself and those around him?

[Give 2 minutes for participants to discuss in small groups or as a large group. You may need to adapt the following based on what participants say in discussion.]

One problem is that he's holding a phone with gloves on. When you're wearing PPE, you should NOT pick up personal objects including phones. Instead, you should remove your gloves and perform hand hygiene before picking up objects to avoid transferring pathogens from your gloves to your hands.

He seems also to be wearing the PPE out of context. PPE should be put on for a task – treating a patient, disposing of waste, cleaning and disinfecting – and then it should be removed when the task is completed.

Slide 5:

Script:

The picture on the last slide reminds us that PPE helps protect you from Ebola or Marburg, but it only works when used correctly every time.

In the last session, we talked about some general do's and don't's for PPE use. Today, we're going to talk specifically about how to correctly put on and take off PPE so that you can receive maximum protection from it.

Slide 6:

Script:

Before we go any farther, let's talk about a couple of words that you'll hear me using today and what they mean.

The first word is "donning." "Donning" means to put something on such as an article of clothing.

The other word is "doffing." "Doffing" is the opposite of "donning." It means to take something off such as an article of clothing.

Today you'll hear me talk about donning and doffing PPE, and that just means putting on and taking off PPE.

Slide 7:

Script:

Exactly how to don and doff PPE depends on the specific PPE items available in your country and in your facility. For example, if a gown is used, the donning and doffing process might look different than if a coverall is used.

This is a link to CDC videos of donning and doffing PPE. Different examples are available to show different ways of putting on PPE based on the available items.

I'll share this link with you so that you can watch the videos on your own time, but we won't go through the specifics of donning and doffing right now because the process varies. Instead, we will focus on some important general considerations to keep in mind when donning and doffing PPE.

Slide 8:

Script:

First, let's talk about some things to keep in mind when you're donning PPE. In the context of Ebola or Marburg, you should wear dedicated clothing or garments under your PPE that can be replaced or laundered such as scrubs. You should take off any jewelry or accessories, and then you should perform hand hygiene. As you put on PPE, you should check it for tears or other damage that could reduce its effectiveness.

When putting on a gown, if it's tied at the back, it should be tied tightly enough that it is secure at the neck and waist. However, you should be careful that it's not tied so tightly that it becomes a knot that you can't get undone when it is time to remove PPE.

Slide 9:

Script:

Non-collapsible facemasks should cover your nose, mouth, and chin, and if your mask has a flexible nose piece over the bridge of the nose it should be adjusted to fit your nose. Any type of face shield or goggles should be placed over the face and eyes. It's important that all masks, face shields, and goggles are adjusted to fit. Remember that you don't want to have to touch PPE on your face once you are done putting on PPE, so ensure that items covering your eyes, nose, and mouth are fitted and secure and won't move around and need adjusting.

As mentioned in our first session on PPE, you will put on two pairs of gloves: an inner pair that goes under the cuffs of the gown and an outer pair that goes over the cuffs of the gown. These will help if the outer layer of gloves needs to be changed, and they will also protect you as you remove your PPE.

Slide 10:

Script:

In some cases, you may need to remove PPE and put on new PPE for example if your PPE becomes heavily contaminated with blood or body fluids or if it becomes damaged while you are working such as a tear in a glove or gown.

When you are done caring for patients with suspected or confirmed Ebola or Marburg, you should remove your PPE before leaving the isolation area or patient care area in the designated doffing location.

If you are wearing PPE to perform waste management or environmental cleaning activities, you should remove your PPE when your task is complete.

Slide 11:

Script:

The risk of self-contamination is very high when removing PPE because of the potential for contamination from PPE to hands and then from hands to mucous membranes – eyes, nose, and mouth – as well as clothing and skin. This makes hand hygiene very important during the process of doffing PPE. Besides keeping hands clean, you want to ensure that the outside of PPE does not touch your skin or any other body part, which can also lead to self-contamination.

PPE removal should be done slowly and carefully. The general principle is that the outermost PPE is taken off first because it's likely to be most contaminated, for example the apron and the outer gloves are removed first. The last thing to be taken off is the inner pair of gloves.

When wearing full PPE for Ebola or Marburg, carefully taking off all PPE items can take 10-15 minutes. However, it's important to take off PPE properly even if you're in a hurry and even if you're tired. Remember that PPE is only effective when used correctly, and proper removal is crucial for keeping you safe.

Slide 12:

Script:

When removing gloves, make sure you're rolling inside out and not touching the surface of the glove that's potentially contaminated.

When removing gowns, you should break the knot and roll it away from the body putting it inside out so that you don't touch the surface that's potentially contaminated.

Notice that both of these steps help ensure that the outside of PPE does not touch your skin or any other body part, which can lead to self-contamination.

Slide 13:

Script:

When removing face shields or goggles, you should remove them from the back by lifting the head band or earpieces to avoid touching the front of the face shield or goggles, which might be contaminated. You should also keep your eyes closed to avoid splashes in the eyes.

And the same goes for the mask or respirator; to remove it, you want to grasp it from the back and pull it forward off your face to avoid touching the front, which might be contaminated.

As you do all this, it's important to keep gloved hands clean so you can remove PPE without spreading contamination. This procedure is just an example, not for Ebola or Marburg-isolation areas where double gloving is recommended. **[Uncertain what this last sentence is referring to.]**

Slide 14:

Script:

As you remove PPE, you should place items into appropriate waste bins. Appropriate waste streams should be available to you in the designated area for doffing PPE. These include a biohazard waste bin for disposable PPE (sometimes yellow, sometimes red) that should be labeled clearly as infectious waste. You should also have available a bucket designated for reusable PPE that will be reprocessed. If you have any re-usable PPE, such as goggles or certain aprons, put them in the designated bucket. When removing PPE, remember that PPE is considered contaminated once you enter the patient area, even if it doesn't look dirty.

Slide 15:

Script:

As you are removing PPE, remember that it's important to keep gloved hands clean so you don't spread contamination. You need to perform hand hygiene after taking off each item of PPE and when you are completely finished removing PPE and have bare hands.

A hand hygiene station should be available to you in the designated area for doffing PPE to help facilitate this.

Slide 16:

Script:

Based on what we've talked about so far, let's check your knowledge.

If you saw a co-worker taking off their gloves like this, what suggestion could you make to them to help them do this more safely?

Slide 17:

[You may wish to adapt the script for this slide based on how participants answered the question on the previous slide.]

Script:

The way this person is taking off their gloves is incorrect. This person runs the risk of splashing contaminated body fluid onto themselves.

To help this person do this more safely, we could suggest that they take off the gloves by grasping the glove at the wrist or palm and carefully rolling it off inside out. This would help avoid splashing and ensure that the outside of the PPE does not touch the person's skin, which could lead to self-contamination.

Slide 18:

Reflection: Encourages participants to apply, analyze, and/or evaluate what they've learned, helps them to deepen their understanding of the topic and also helps you to check their comprehension of what they learned.

Personalization: Helps participants think about how what they have learned applies to their specific situations. Connecting learning to personal experiences helps learners to better understand and remember the ideas taught.

Script:

Now that we've talked about proper techniques for donning and doffing PPE, I'd like to hear about your personal experiences with PPE.

What challenges have you experienced with putting on and taking off PPE properly in the past? Do you expect to have similar challenges with PPE for Ebola or Marburg? How can these challenges be overcome?

[List challenges as participants mention them. Then, ask the group to offer suggestions for ways they might overcome those challenges. Answers will vary. You may also offer suggestions as you see fit.]

Slide 19:

Script:

To wrap up, I want you to remember two key things from this session. First, PPE helps protect you from infection. And if you keep yourself from becoming infected, you protect your patients, co-workers, family, and friends. But PPE only works if it is worn correctly and removed correctly. Remember that there is especially high risk for self-contamination when taking off PPE, so you want to follow the steps for taking it off exactly and remove it slowly and carefully even if you're tired and even if you're in a hurry.