IPC for Marburg Virus Disease(MVD):

Preventing MVD from Entering Your Healthcare Facility

Speaker's Notes and Script

Slide 1:

Intended Audience*: This presentation focuses on what healthcare workers need to know to prevent Marburg virus disease from entering healthcare facilities. It focuses on the strategies of screening, isolating, and informing those who need to know.*

See <Facilities Mgmt Slide Deck 1: Preparing a Screening Area at Your Facility>[link] and <Facilities Mgmt Slide Deck 2: Peparing a Short-term Isolation Area> [link] for details on what members of facilities management should know to assist the process of identifying, isolating, and informing.

Please note that the IPC for Marburg Virus Disease topics 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 accordingly.

Estimated time with audience participation: *Approximately 30 minutes*

Script*:*
Welcome! Today we'll be focusing on key strategies to protect you, your patients, and your friends and family from Marburg virus disease. We're going to talk about identifying people arriving to health facilities who might have Marburg and what to do if you suspect someone may be ill with Marburg.

Slide 2:

Script:
We have three learning objectives for today's session. By the end of our time together today, you should be able to name the 3 key strategies to prevent introduction of Marburg virus disease into health facilities, explain why screening for Marburg virus disease is important, and describe best practices for the screening process.

Slide 3:

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 and remember 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*:*
Let's start with a question. Why is it important to identify people who might have Marburg virus disease before they enter your healthcare facility?
[Allow participants 2 minutes to discuss as a large group or in small groups. If it doesn't come up in discussion, add the following.]
If a person with undiagnosed Marburg virus disease were to be allowed into a healthcare facility, they could spread Marburg virus disease to patients nearby and to the staff that cares for them. Early identification and separation of suspected Marburg virus disease patients prevents bringing unrecognized Marburg virus disease into healthcare setting, which protects you and your patients. By keeping yourself healthy, you also avoid spreading illness to your family and friends. So, **keeping Marburg virus disease patients separate in a healthcare facility protects you, your patients, and your community**.

Slide 4:

Script:
There are 3 key strategies to prevent the introduction of Marburg virus disease in healthcare facilities:

- Identifying people who might be ill with Marburg virus disease before they enter the facility.
- Isolating suspected Marburg virus disease patients from others.
- And informing the necessary authorities at your facility.

These things are the most important thing we can do at our healthcare facilities to prevent the spread of Marburg virus disease.

Slide 5:

Script:
Let's start with the process of identifying people potentially ill with Marburg virus disease. This process of identification is called screening. **Screening** is like a sorting process. It operates like a sieve, separating the people who probably have a condition from those who probably do not. In areas with Marburg virus disease transmission, there is increased risk that a patient will present to a facility with signs and symptoms of Marburg virus disease or exposure risk factors. Screening allows suspected Marburg virus disease patients o be promptly isolated and referred for testing and care at a facility intended for that purpose.

Screening involves looking for Marburg virus disease symptoms and determining risk factors early in the care process – preferably before someone even enters the healthcare facility – so screening should take place at the point of entry to your facility.

Screening does not require close or physical contact. It can be done with a non-contact thermometer and questions. We will talk more about HOW to screen in a few minutes.

Slide 6:

Script:
If, through the screening process. you identify someone who may have Marburg virus disease, you should immediately do two things:
First: Isolate the patient.
Then: Quickly inform designated physicians, nurses, or administrators at your healthcare facility so that they are aware.

Isolating prevents the person from spreading Marburg virus disease to you, other healthcare workers, or patients. Your facility should have a plan for how to isolate people suspected of having Marburg virus disease and providing needed medical care to them until they can be transferred to a Marburg virus disease Treatment Unit. Being placed in isolation may be scary for your patient. To help reassure them, compassionately explain to them what is happening, what next steps are, and why this is important for their well-being. That is, if they do have Marburg virus disease, quickly starting proper care results in better outcomes (decreased mortality) for patients.

Informing the designated point of contact at your healthcare facility allows patients suspected of having Marburg virus disease to be referred for testing and care. So, it's important to know who this designated individual is. The designated point of contact will verify and ensure isolation measures are in place, and they will communicate the potential case to the appropriate phone number identified by surveillance. If you aren't sure who you need to inform at your facility, ask your supervisor.

Slide 7:

Script:

As already mentioned, early identification and separation of suspected Marburg virus disease patients prevents bringing unrecognized Marburg virus disease into the healthcare setting. This protects you and your patients. By keeping yourself healthy, you also avoid spreading illness to your family and friends.

Slide 8:

Script:
We've talked about why using a screening process to identify people suspected to have Marburg virus disease is important. Now, let's talk about HOW to screen.

Slide 9:

Script:
Everyone who enters a facility should be screened. This includes patients, healthcare workers, and accompanying family members.

Screening should happen before any patient care activities. This can be at a facility entrance (such as the main gate) or during patient registration (such as a registration desk or office). For an additional layer of protection, screening may also happen during check-in to wards (such as the maternity ward).

The screening process should be tailored to the facility design, the human resources available, and the supplies available.

When you are screening people, always assume that they might be infectious and use standard precautions for ALL patients ALL the time. Future sessions will dive more deeply into standard precautions in the context of Marburg virus disease.

Slide 10:

Script:
Remember that screening does not require close or physical contact. For your safety, the World Health Organization recommends that during screening activities, you maintain a distance of at least 1 meter. If you cannot maintain this distance, you should wear personal protective equipment, also called PPE, including gloves, a long-sleeve gown, eye protection (such as goggles), and a surgical face mask.

For your protection, you also need to avoid direct face-to-face interaction to protect mucous membranes – eyes, nose, and mouth. Your facility may place plexiglass at the screening station between the screener and the person being screened. If that is not an option at your facility, angling chairs away from each other, as seen in this image, is a simple and effective way to achieve this.

As you screen patients, you should perform hand hygiene often. We will talk in more detail about hand hygiene in a future session.

Slide 11:

Script:
Generally, screening involves 2 parts:
A **temperature check**.
And a **questionnaire** about signs, symptoms, and risk factors in the past 21 days.

Side 12:

Script:
The screening process should look something like this.

- Before beginning screening, you should explain what is happening to the person being screened. You can say something like: "To keep everyone safe, we are screening for Marburg virus disease. We will take your temperature and ask you a few questions."
- Then, you can proceed with the temperature check and questionnaire about symptoms and risk factors.
- Based on the information gathered from the temperature check and questionnaire, you'll need to take action. You may be able to let the person enter the facility or you may need to escort the person to an **isolation area** and **inform** someone specific in your facility about the potential Marburg virus disease case.
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Now, let's talk about the temperature check and the screening questionnaire in more detail.

Slide 13:

Script:
For the temperature check, you should use a non-contact, infrared thermometer if possible. We will talk generally about how to use this type of thermometer for screening, but instructions for infrared thermometers may vary based on the type or brand you're using. Always check the package insert or the instructions on the manufacturer's website to know how to correctly use the device that your facility has.

Before taking someone's temperature for screening, you should turn on the thermometer and let it warm-up for at least 15 minutes so that it acclimates to the temperature of the surrounding environment. You should confirm that the thermometer has the correct settings. For example, ensure that you have the measurement set to Celsius and that the device is set to "body" instead of "object."

Slide 14:

Script:
Once the thermometer is ready for use, you should stand beside the person whose temperature you're going to take. You may need to ask them to push back their hair or head scarf, remove their hat or glasses, or wipe off perspiration because perspiration in pores can lead to a lower temperature reading.

When taking the temperature, aim for the temple, above the end of the eyebrow, not the forehead. You should hold the thermometer 3-5 centimeters from the person's temple and press the button. Notice that 3-5 centimeters is equivalent to about 3 fingers width as shown in the bottom image here. You don't need to put three fingers up to measure. Instead, visualize this in your head. Remember that screening should not involve physical contact with the person being screened.

Slide 15:

Script:
As you screen patients, you also want to make sure that you're using temperature ranges as outlined in your country's case definition for Marburg virus disease. Given the range on this slide, if a person has a temperature of 38 degrees Celsius or above, they are considered to have a fever. If the temperature is less than 35 degrees Celsius, you need to check that your thermometer has the correct settings and take the temperature again.

If you're working at the screening station, as you take each person's temperature, you should record the temperature on a screening register. You should then continue the evaluation of exposures and symptoms as indicated on the screening algorithm, which we'll see on the next slide.

Slide 16:

Script:
To help you screen patients and appropriately place them within the facility, a job aid or algorithm such as this can be kept at the screening area for reference. This is an example [from April 2023] of a Marburg virus disease screening algorithm from Equatorial Guinea. The algorithm you work with may look slightly different, but generally, this is what you can expect to see.

The algorithm starts in the top, left box that says Fever. You can see here that after checking the person's temperature, if a person has no fever, you would ask if they have experienced any unexplained bleeding. If they answer no, they are free to enter the healthcare facility. If they answer yes, they would be considered a suspect case and would need to enter an isolation area.

If a person has a fever, the next step is to ask about symptoms and risk factors. The listed options in the signs and symptoms box are typical signs and symptoms that may be experienced by someone with Marburg virus disease. If the person answers that, yes, they have had at least 3 of those symptoms, they would be considered a suspect case and would need to enter an isolation area.

If the person answers "no" to having had signs or symptoms, the next question would be to ask if the person has traveled to an area where there are confirmed Marburg virus disease cases or if they have had contact with someone suspected of having Marburg virus disease. If they answer yes, they should enter the isolation area. If they answer no, they should be allowed to enter the healthcare facility.

Notice that screening is a complex process and is more than just taking someone's temperature. Patients can have Marburg virus disease but not have a fever. It's important to ask about other symptoms and about risk during screening. If you will be screening patients, you'll need to understand the screening algorithm well and know who to contact if you come across people meeting these risks.

Slide 17:
Script:
To accomplish all that we've talked about at screening stations, these stations should have several pieces of equipment or supplies including:

- A job aid or screening algorithm showing what the case definition is, so you know you're identifying cases appropriately
- A patient register to log anyone entering the healthcare facility
- An infrared, non-contact thermometer
- And either batteries or a back-up thermometer in case one of the thermometers stops working.

When distance cannot be maintained, the screener will need to wear PPE as mentioned on the Screening Safety slide, so PPE should also be available where necessary.

Before beginning a shift in which you'll be screening, check that these supplies are at your screening station.

Slide 18:
Apply. *Ask learners to apply the information they've just heard to check their understanding.*

Script:
Imagine you see your co-worker screening someone entering your facility like this. What suggestions would you give them to help them screen more safely? [*Give participants 2-3 minutes to write down their ideas, discuss in small groups, or discuss as a whole group*.]

Slide 19:
[Based on the discussion on the previous slide, add any of the below information that has not yet been discussed.]

Script:

Let's talk first about what this screener is doing well:

- First, the screener is wearing some PPE, which could be good depending on the situation. However, it's not clear if this is the appropriate PPE for this screening process - standard precautions are recommended unless the patient has certain symptoms, and the patient's symptoms are unknown based on this picture.
- The use of plastic chairs is a good thing since they are nonporous
- There is also a physical barrier – the desk - between the screener and the patient. This physical barrier helps to remind healthcare workers to maintain distance and avoid direct contact.

Several things could be improved here, though, to help protect the screener during the process:

- Going back to the PPE, the screener is not wearing gloves. If the mask and gown are needed, gloves and eye protection would be needed, too.
- The screener should have at least one meter of distance between themselves and the person being screened, and they should not be standing face to face with the person being screened. If there is no plexiglass divider to protect them, they should sit at an angle as seen in the images here.
- The infrared-thermometer is also not being used properly. It depends on manufacturer's instructions, but generally, the thermometer should be 3-5cm from the person's forehead or temple. This person has the thermometer too far away from the forehead or temple of the person being screened.

Slide 20:
***Reflection**: Encourages participants to apply, analyze, and/or evaluate what they've learned, which helps them to deepen their understanding of the topic and also allows you to check their comprehension of what's been discussed.*

***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 you're familiar with why we need to identify suspected patients, isolate them, and inform the proper contacts and you know the basics of how to do this, let's think about how this might work in your facility.

If you've ever needed to screen people entering your facility, how is the process of screening for Marburg virus disease similar to or different from screening processes you have followed in the past?
[Give participants 2-3 minutes to discuss in small groups or as a large group.]

What challenges have you encountered in the past with screening? If you haven't participated in screening before, what challenges do you imagine you might encounter?
[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. Recommended time for this discussion is 7-10 minutes. You may choose to keep this conversation shorter due to time constraints or to extend it if time allows.]

Slide 21:
Script:
As we close, I want to remind you that this process of identifying, isolating, and informing is the most important thing we can do at our healthcare facilities to protect ourselves, our patients, and our families and communities. During an Marburg virus disease outbreak, screening patients to identify those who might be ill, isolating patients with suspected Marburg virus disease, and informing the proper authorities is crucial to keep Marburg virus disease out of your healthcare facility and to keep you and others safe.