Centers for Disease Control and Prevention National Center for Emerging and Zoonotic Infectious Diseases



Infection Prevention and Control (IPC) for Marburg Virus Disease (MVD):

Waste Management Part 2 - Final Waste Disposal

Healthcare Settings with Limited to Intermediate Resources

Updated: March 2023

Learning Objectives

After this presentation, participants will be able to

- Explain why proper waste disposal during an MVD outbreak is important
- Identify ways to improve final waste disposal at their own facilities.

Discuss

Once waste has been collected from the waste bins in your facility, how is waste disposed of?

Does waste disposal differ for general waste, infectious waste, or other kinds of waste collected? If so, how?

Waste Disposal

Why Is Waste Disposal Important?

 Inappropriate waste management poses potential health risks to you, your patients and other staff in your facility, as well as to your community.

Potential risks:

- Exposure to items contaminated with Marburg virus (e.g., contaminated gloves)
- Exposure to sharp items that pose a risk of physical injury as well as exposure to Marburg virus (e.g., used needles)

Waste Disposal

- Healthcare facilities must have a functional system for the final disposal of waste
- Infectious and potentially infectious waste must be:
 - Incinerated

OR

 Treated with non-burn treatment (autoclaving/grinding or other alternative treatment) before being placed in regular waste stream

OR

Buried

Incinerator Placement

- On the healthcare facility property
- Away from flow of patients
- In an area where they will NOT disturb people



Incinerators Options

Best Option

- High temperature incinerators
- De Montfort brick (double-chamber) incinerators
 - Allows for higher temperatures = more effective waste incineration and reduced toxic emissions
- Drum incinerators (not recommended)
 - A better option than open burning



Not Recommended

Interim Option: Burn Pits

- Generally, it is best to avoid open burning of healthcare waste
 - releases toxic gases
 - does not reach high enough temperatures to fully destroy infectious waste
- In emergencies, burn pits can be used until incinerators or other treatment methods (such as autoclaves) become available.

Interim Option: Burn Pits

- Burn pits should be
 - away from patient flow
 - dug deep
 - marked off





Other Considerations

- Avoid situations where
 - Waste isn't segregated
 - Waste is overflowing because the final disposal option needs maintenance



Knowledge Check: Waste Disposal

While visiting a healthcare facility, you observe this example of waste disposal.

What suggestions could you give?



Knowledge Check: Feedback

- Assist the facility to identify solutions to deal with current load of waste
 - Use an incinerator if available.
 - If no incinerator available, dig sufficiently wide and deep burn pit
 - Carefully and safely (wearing appropriate PPE and using a shovel) transfer waste to burn pit and burn in sections



Reflection

- Where is final waste disposal at your facility?
- What maintenance might be needed?
- Is there capacity to take on additional waste (e.g., isolation units, additional PPE waste)?
- What resources, such as fuel for burning waste and transporting equipment, might be needed?

Key Takeaways

- Proper medical waste disposal during a Marburg virus disease outbreak is crucial to keep you, others at your facility, and your community safe.
- A high temperature incinerator is the best option for incinerating medical waste.
- If a burn pit must be used as an interim option, it should be away from patient flow, dug deep, and marked off.

Thank you!

For more information, contact CDC 1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

