



# IPC for Marburg Virus Disease (MVD): Injection Safety

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Healthcare Settings with Limited to Intermediate Resources

# Learning Objectives

After this presentation, participants will be able to

- Explain why one needle and one syringe for one patient one time is important in the context of Marburg virus disease
- Describe 3 things to avoid when disposing of used needles.

# Discuss

Many steps are required for giving injections safely. What are 2 things you always do when preparing or giving an injection to keep you and/or your patient safe?

# Why Injection Safety?

Unsafe injection practices can lead to transmission of Marburg virus disease to patients and staff.

- Re-using needles and syringes might contribute to spread of Marburg virus disease among patients.
- Unsafe disposal leading to accidental needle sticks can contribute to spread of Marburg virus disease among patients and staff.

Following safe injection practices helps protect you, your patients and coworkers, and your community from Marburg virus disease.

# 7 Steps for Safe Injections

STEP 1: Hand hygiene

STEP 2: Clean workspace

STEP 3: Sterile and new syringe and needle

STEP 4: Sterile vial of medication and diluent

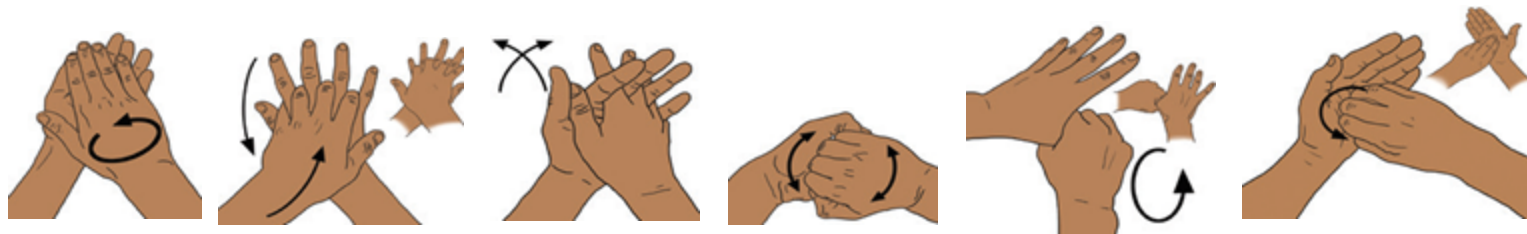
STEP 5: Skin preparation

STEP 6: Appropriate collection of sharps

STEP 7: Appropriate waste management

# Step 1: Hand Hygiene

- Perform hand hygiene **before** preparing injections
- Perform hand hygiene **before** a clean procedure (injection) and **after** exposure to blood/body fluid or patient contact (after injection)
- Glove use does not replace the need for hand hygiene



## Step 2: Clean Workspace

- Prepare injection in a **clean, designated area**



## Step 3: Sterile Needle and Syringe



New and undamaged  
packaging

- Always use a sterile syringe and sterile needle.
- **1 needle and 1 syringe for 1 patient 1 time**
- **DO NOT** use a needle or syringe if the packaging has been punctured, torn, or exposed to moisture



# Step 4: Sterile medication vial



## Medication Vials

- Always read vial labels and follow product-specific recommendations for use, storage, and handling.
- Check the route of administration (*intramuscular?* *intradermal?*) and the expiration.
- Wipe the stopper/diaphragm with 70% alcohol (or other available antiseptic) and allow to air dry
- Only enter a medication vial with a **sterile needle**

## SIZE DOES NOT MATTER!



SDVs and MDVs can come in any shape and size. **Do not assume** that a vial is an SDV or MDV based on size or volume of medication. **ALWAYS check the label!**

## Single-dose and Multi-dose Medication Vials

- Use single-dose medication vials whenever possible
- If using a multi-dose vial, disinfect diaphragm before each use and use sterile needle and syringe each time to avoid contamination

# Step 5: Skin preparation



- Apply a 60-70% alcohol-based solution (isopropyl alcohol or ethanol or other available antiseptic) to a cotton swab or single-use pad
- Wipe the area from the center of the injection site outwards, but do not go back through the same area.
- Apply the solution for 30 seconds and then let it dry completely.
- DO NOT use cotton wools stored in a wet multi-purpose container

# Step 6: Appropriate Collection of Sharps



## DO

- ✓ Discard needle and syringe immediately after use

## DO NOT

- ✗ Detach the needle from the syringe
- ✗ Recap needles
- ✗ Bend or break the needle
- ✗ Leave a needle in a vial or IV bag
- ✗ Overfill sharps containers



# Step 7: Appropriate Waste Management

## Sharps containers

- Should NOT be overfilled

## Location

- In each patient care area
- Within arm's reach when giving an injection
- On a medicine cart, on a wall, or on a nearby table/surface
- NOT on floor (dangerous for children; cardboard boxes can break with repeated moisture/water on floor)



# Knowledge Check: Sharps Safety

What needs to change to  
make sharps disposal  
safer here?



# Feedback: Sharps Safety

- Sharps box should be placed off the ground
  - Right now, it's easy for children or others to reach in
- Sharps waste needs to be **in** the sharps container – not just on top
- Needles should not be recapped or detached from syringes
- Separate bins for waste segregation is a good practice.
  - But gray box should be labeled



# Reflection

- What challenges do you encounter in your facility to the practice of 1 needle, 1 syringe for 1 patient, 1 time? How can these challenges be overcome?
- What challenges do you encounter in your facility to disposing of needles and other sharps safely in sharps containers? How can these challenges be overcome?

# Key Takeaways

**Protect patients** → 1 syringe and 1 needle for 1 patient 1 time.

**Protect Yourself** → Dispose of needles and other sharps correctly



# Thank you!

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

