



# **Injection Safety**

## **in the context of an EVD outbreak**



# Injection Safety

- Unsafe use of injections contributes to the spread of diseases, including EVD

## WHAT MAKES AN INJECTION UNSAFE?

1

**Re-use of syringes and needles,** and other injection equipment.

2

**Overuse of injections** for illnesses where medicines by mouth are available and recommended.

3

**Lack of clean work spaces and hands.**

4

**Unsafe collection and disposal** of used injection equipment.

## Step 1

# Prepare injection

- Prepare injection in a **clean, designated area**
- Check the
  - Route of administration (*intramuscular?*  
*intra-dermal?*)
  - Expiry date on the vial or ampoule
- Always follow product-specific recommendations for use, storage, and handling



## Step 1

# Prepare injection



New and undamaged packaging

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



Step 1

# Prepare injection

## Medication Vials

- 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**

## 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



**NO**

**SIZE DOES NOT MATTER!**



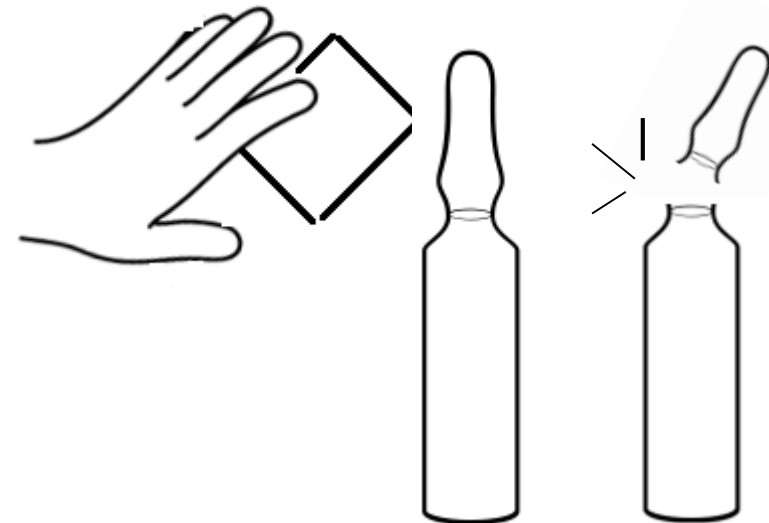
SDVs and MDVs can come in any shape and size. **Do not assume** that a vial is an SDV or MDV based on size or volume of medication. **ALWAYS check the label!**



## Step 1

# Prepare injection

- Never leave a needle in the vial stopper or IV bag
- Medication vial/ampoule that requires a metal file to open it or you have to snap off the top (glass vials), protect fingers with a clean barrier (e.g., a small alcohol pad or gauze while opening)

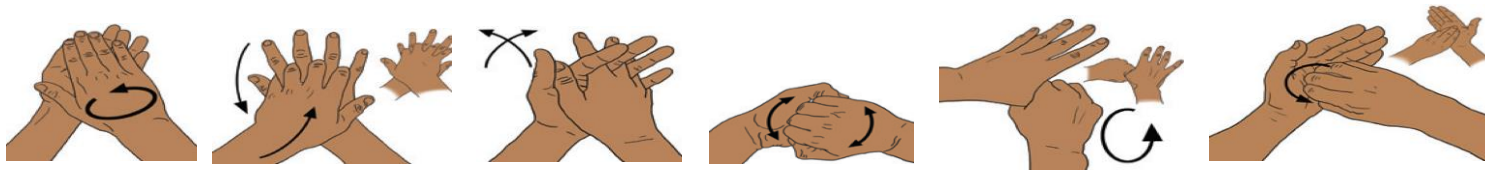




## Step 2

# Perform 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





# Perform hand hygiene



## Glove Use during EVD Outbreak

- **During epidemics, gloves are required for all injections**
  - intravenous (IV), intramuscular (IM), intradermal (ID) and subcutaneous (SC), including syringes used in the reconstitution of drugs or vaccines
- Gloves must be changed between each patient
- Gloves must be changed between each procedure on the same patient (e.g., before invasive procedure)



### Step 3

## Disinfect the skin



*Image: WHO Guidelines on Drawing Blood: Best Practices in Phlebotomy*

- 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 4

## Give injection



### Give injection—preventing sudden movement by the patient

- Dispose of used needles and syringes immediately in a sharps container
- Do not recap needles

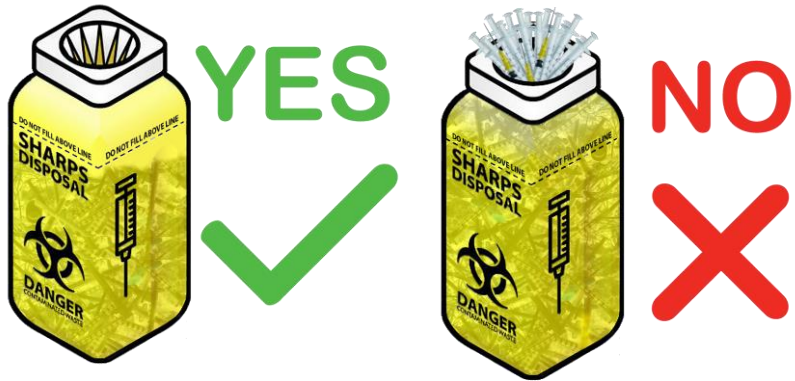


Step 5

# Prevent access to used needles/syringes



- **Seals sharps containers and keep them in a secure area for transport and final disposal**
  - Do not open, empty, reuse, or sell
- **Handle sharps waste in an efficient, safe, and environmentally conscious manner**
  - If incineration is used for final disposal, use high-temperature incinerators (over 1000 degrees Fahrenheit) with filters



# Summary



**Do not** detach the needle from the syringe



**Do not** recap the needles



**Do not** leave the needle in the vial or bottle



**Do not** bend or break the needle



**NEVER** put your hands in the sharps container



**NEVER** force the sharps/sharp objects into the sharps container



Maximum  $\frac{3}{4}$



**DO NOT** point a used sharp object at yourself or others

**Use of multidose vial in ETU is not recommended**

# SUMMARY



**1. Clean workspace**

2. Hand hygiene

3. Sterile safety-engineered syringe

4. Sterile vial of medication and diluent

5. Skin cleaning and antiseptis

6. Appropriate collection of sharps

7. Appropriate waste management

# Ministry of Health Job Aide



For more information on the description of practices that should be in place to prevent the transmission of infections when using injections, refer to the [Injection Safety Job Aide](#)

<http://library.health.go.ug/ebola-virus-disease-evd/ebola-iec-materials/injection-safety-context-evd-outbreak>