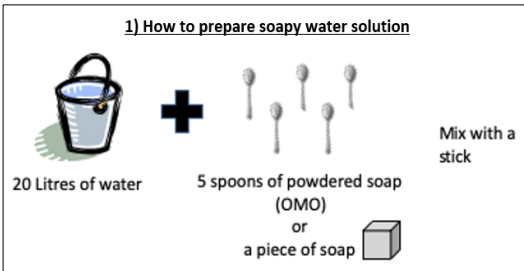
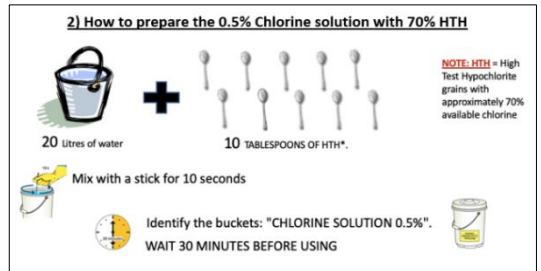
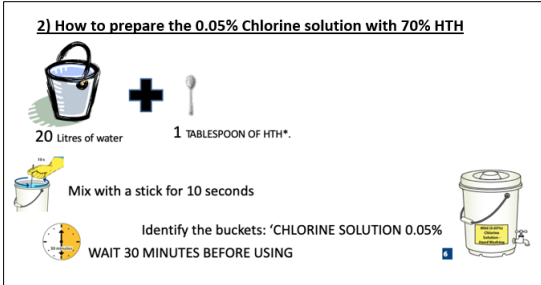


Cleaning and disinfection procedures for healthcare facilities in the context of Ebola Virus Disease Job Aide

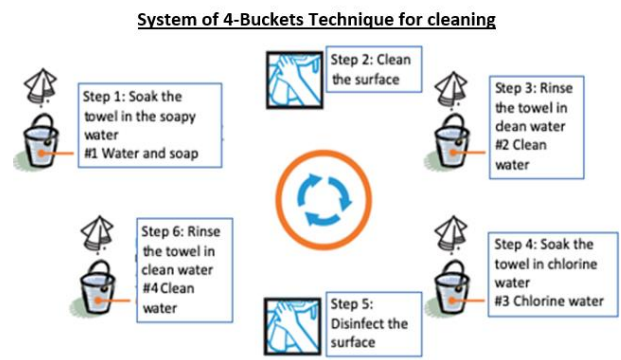
This document is a detailed step-by-step procedure for the environmental cleaning and disinfection process for the care of suspected, confirmed, or probable Ebola Virus Disease (EVD) cases at healthcare facilities. Basic principles:

- Cleaning is required before any disinfection process
- Always clean/disinfect from the cleanest to the dirtiest area (e.g., clean and disinfect screening and triage area before isolation area, clean and disinfect patient beds before patient toilets)
- Clean/disinfect from high to low to prevent dirt and microorganisms from dripping or falling and contaminating already cleaned areas (e.g., clean and disinfect surfaces before floors, clean and disinfect bed rails before bed legs)
- Always use clean equipment for each location (e.g., screening and triage, isolation area) and each patient (e.g. a new rag/cloth per bed)
- Special purpose buckets should be labelled and/or coloured differently (**One bucket = one task**)
- Cleaning supplies for isolation areas should be kept and used only in those areas
- Never soak or dip a dirty rag/cloth into a soapy water or chlorinated water solution (i.e., don't double dip cloths during use)

<p>Step 1: Prepare equipment</p>	<p>PPE for each hygienist:</p> <ul style="list-style-type: none"> • Protective glasses or face shield • Mask • Hair net/Headgear/ Protective hood • Gloves • Cleaning gloves • A waterproof gown or overalls • An apron (if the gown is not waterproof) • Rubber boots 	<p>Cleaning and disinfection products:</p> <ul style="list-style-type: none"> • Soap and drinking/clean water (for the soap solution) • Strong chlorine solution (0.5%, labelled) • Weak chlorine solution (0.05%, labelled) • 4 buckets (1 = soapy water, 2 = clean water and 1 = 0.5% chlorinated water) • Cleaning cloth (rags or towels) • Squeegees with handles - <i>not mops</i> • Biosafety box (if required) • Infectious waste bag
<p>Step 2: Prepare chlorinated water and soapy water</p>	<ul style="list-style-type: none"> • Organise all materials/equipment and prepare the chlorinated water and soapy water solutions: <div style="display: flex; justify-content: space-around;"> <div data-bbox="343 1131 869 1400"> <p>1) How to prepare soapy water solution</p>  <p>20 Litres of water + 5 spoons of powdered soap (OMO) or a piece of soap</p> <p>Mix with a stick</p> </div> <div data-bbox="949 1131 1492 1400"> <p>2) How to prepare the 0.5% Chlorine solution with 70% HTH</p>  <p>20 Litres of water + 10 TABLESPOONS OF HTH*</p> <p>Mix with a stick for 10 seconds</p> <p>Identify the buckets: "CHLORINE SOLUTION 0.5%". WAIT 30 MINUTES BEFORE USING</p> <p><small>NOTE: HTH = High Test Hypochlorite grains with approximately 70% available chlorine</small></p> </div> </div> <div data-bbox="598 1444 1141 1727" style="margin-top: 10px;"> <p>2) How to prepare the 0.05% Chlorine solution with 70% HTH</p>  <p>20 Litres of water + 1 TABLESPOON OF HTH*</p> <p>Mix with a stick for 10 seconds</p> <p>Identify the buckets: "CHLORINE SOLUTION 0.05%". WAIT 30 MINUTES BEFORE USING</p> </div>	
<p>Step 3: Perform hand hygiene and put on PPE</p>	<ul style="list-style-type: none"> • Perform hand hygiene. Put on PPE according to WHO procedure (gloves, goggles or face shield, face mask, coveralls or gowns, apron, rubber boots). Heavy rubber gloves should be worn over latex/nitrile gloves. Ask the observer to review if there are breaches in the PPE. 	
<p>Step 4: Remove contaminated waste</p>	<ul style="list-style-type: none"> • TAKE OUT the waste and dirty linen/laundry <ol style="list-style-type: none"> Remove and dispose of waste, clean and disinfect all waste containers Replace waste bag (if applicable) Remove dirty linen/laundry (if applicable) Check and replace sharps containers when they are ¾ full. Transport and dispose of the waste in the appropriate place according to the type of waste 	

Step 5: Perform cleaning and disinfection

- Perform cleaning and disinfection utilising the 4-bucket system:



CLEAN: remove visible waste with soap or detergent and water

- Soak the clean towel in soapy water (bucket 1)
- Clean all surfaces. Always proceed from the cleanest to the dirtiest area. Always proceed from the highest to the lowest area
- Rinse the towel with clean water (bucket 2)
- **Always** clean before disinfecting, use of disinfectant on a surface containing debris will eliminate the effectiveness of the disinfectant.

DISINFECT: use a strong solution of chlorinated water (0.5%) (respect the contact time of 10 minutes)

- Soak the towel in chlorinated water (bucket 3)
- Disinfect the surface. Always proceed from the cleanest to the dirtiest area. Always proceed from the highest to the lowest area. **Do not spray disinfectant in clinical care areas, whether occupied or not.**
- Leave the surfaces with disinfectant for 10 minutes to ensure sufficient contact time with the disinfectant
- Rinse the towel with clean water (bucket 4)

DRY: Let the surfaces air dry

- Clean and disinfect walls in the same way as other surfaces (e.g. tables, supplies)

Procedures for surfaces containing body fluids (faeces, urine, vomit or blood)

- Wipe up the area with a cloth or absorbent (paper) towel if available.
- Immediately dispose of the soiled cloth/towel in a plastic bag for infectious waste treatment.
- **Do not** soak the dirty wipe/towel in chlorine solution or water after use as it is considered highly infectious waste. This only increases the handling of infectious waste and the risk of contamination.
- Clean and disinfect using the above 4-bucket technique
- Let the surface dry naturally

Procedures for containers containing body fluids (excrement, urine, vomit or blood)

- Keep the container covered if possible
- Empty the contents into the latrine
- Clean with soap and water
- Apply a strong chlorine solution (0.5%), leave for 10 minutes.
- Dispose of the wastewater from the container in the latrine
- Allow to air dry, preferably in the sun.

a. Procedures for plates, cups and utensils used by the sick/ill patient

- Dispose of left-over food or fluids in the latrine
- Wash with soap and water
- Immerse plates, cups and utensils in a weak chlorine solution (0.05%) for 30 minutes
- Rinse with clean water and allow to air dry

Procedures for latrines, toilets, washbasins and showers

- If the surfaces contain visible body fluids, use the procedure for surfaces containing body fluids described above
- After cleaning all body fluids, follow the 4-bucket technique described above

Procedure for cleaning and disinfecting towels and patient clothing

- Place soiled linen in a clearly labelled, leak-proof container at the point of release and disinfect the outside of the container before removal
- Always transport the linen/laundry in its container to the laundry room (washing area) where it will be washed and disinfected
- Take the dirty laundry and empty it into a drum containing water (hot if available) and soap, soak it completely in water and wash well
- Stir it with a stick, then discard the water and refill the drum with clean water to rinse
- Empty it into a drum containing a 0.05% chlorine solution, use a stick to stir the cloth, and then leave it to soak for up to 30 minutes
- Remove the cloth, rinse in clean water, squeeze out excess water and allow to air dry
- ***If washing and disinfection are not possible for any reason, it is prudent to incinerate the linen so as to avoid any risk of contamination for the persons in charge of their care.***

Procedures for reusable PPE

- Collect reusable PPE (boots, heavy-duty gloves, heavy-duty aprons, and goggles)
- Remove body fluids
- Wash with soapy water
- Soak PPE in a bucket of 0.5% chlorinated water for 10 minutes
- Rinse with clean water
- Hang it out to dry, allow to air dry
- Pour used chlorinated water and soapy water into patients' latrines

Note: Inspect and discard if breakages, tears in the re-usable PPE

Step 8: Disposal of contaminated items	<ul style="list-style-type: none"> ● Ensure that all soiled items and contaminated items are safely disposed of in an incinerator, burn pit, or designated waste disposal site. ● If found, dispose of syringes, needles, intravenous catheters, scalpel blades and other sharps in appropriate puncture-proof containers.
Step 12: Removal of PPE	<ul style="list-style-type: none"> ● Remove PPE according to the standard procedure. An observer should supervise doffing to ensure the safety of the procedure. Discard the PPE that is disposable on the waste bin/bag. Remove boots and reusable aprons and place them in appropriate plastic bag/bin to send to PPE decontamination area. Perform hand hygiene.

Cleaning frequency

Articles	Frequency
Surfaces (tables, chairs)	As specified based on location (see below)
Plates/eating utensils	After each patient
Reusable PPE: aprons, cleaning gloves, goggles, boots	After cleaning up a spill On leaving isolation When visibly dirty At the end of each day
Location	Frequency
Screening and triage	At least twice a day, or as needed (e.g. EBOLA suspect case)
Isolation	At least once a day, after discharge or as required
Other places of patient care	At least once a day, after each patient or as needed
Latrines	At least twice a day, or as needed
All other locations	Immediately after a spill of body fluids