

## Skin Preparation for All Circumcision Methods

### *Standard Operating Procedure for Voluntary Medical Male Circumcision Providers*

#### **PURPOSE AND INSTRUCTIONS TO PROVIDERS:**

- This standard operating procedure (SOP) summarizes essential skin preparation responsibilities for clients, providers, and assistants to reduce the risk of infection, including infection causing tetanus, following voluntary medical male circumcision (VMMC).
- Programs should ensure the “client’s role” instructions are clearly communicated to VMMC clients and their parents/guardians (if applicable) **before they arrive** for VMMC, e.g., at the time of appointment booking. Instructions should be shared verbally and as a written step-by-step pamphlet in the local language.

#### **ACCOMPANYING MATERIAL:**

- Job aid: Skin Preparation for All Circumcision Methods
- Client Brochure: Tetanus and Voluntary Medical Male Circumcision

#### **THE CLIENT’S ROLE:**

The client should carry out the following (also summarized in the accompanying client brochure):

1. At home, before coming to the circumcision site, use soap and clean water to **thoroughly wash the entire genital area**, including the scrotum, penile shaft and area under the foreskin to remove all visible dirt and debris. Many younger adolescents may have physiological phimosis and their foreskins will not retract easily. The instructions should encourage retracting and washing under the foreskin, but note that if the foreskin cannot be easily retracted, or if the client has never retracted his foreskin, he should not force it and instead notify clinic staff. Forcing the foreskin to retract can cause bleeding, discomfort, and emotional distress.
2. If the genital area is not cleaned appropriately when the client presents for circumcision, he should be provided with the same cleaning instructions, soap, and clean water to wash himself in a nearby private space (e.g., a washroom/bathroom).

**Cleaning is an essential step. Antiseptics will not be effective if the area is not first *thoroughly* cleaned.**

#### **THE HEALTHCARE PROVIDER’S ROLE:**

The healthcare provider and/or assistant should carry out the following (also see note on final page):

1. Take a proper medical history from the client, including whether he has previously experienced itching or rash from iodine antiseptic. He may recall iodine antiseptic from its orange/yellow appearance on the skin. If allergic, use chlorhexidine gluconate as an alternative. If client is also allergic to chlorhexidine gluconate, circumcision should not proceed.
2. Wash hands with soap and water and dry thoroughly, or use 3-5 ml (enough to fill the palm of a hand) of alcohol-based rub on visibly clean hands for 20-30 seconds and allow to dry.
3. Put on a single pair of gloves for skin preparation prior to the procedure. Gloves must be sterile to avoid contaminating sterilized instruments, including those in a pre-packaged single-use

instrument “kit”, and must be put on prior to touching any sterile instruments (reusable or single-use) or single-use materials (e.g., gallipot, gauze, sponge holder) from inside a sterile kit.

- a. Once skin preparation has begun, gloves are no longer sterile; **do not touch the sterilized kit or tray of instruments again** until gloves have been removed, hands cleaned, and new sterile gloves have been applied (*details in Steps 8 and 9*).
4. Do not shave hair. Shaving can cause small skin cuts and promote bacterial colonization, which can lead to infection. Any long hair that may obstruct suturing or device placement can be trimmed with scissors.

#### ***Timing of skin preparation in relation to anesthesia***

- For circumcision methods requiring injected anesthesia, the anesthetic agent may be injected before or after skin preparation. In accordance with the World Health Organization (WHO) *Considerations for Implementing Models for Optimizing the Volume and Efficiency of Male Circumcision Services (MOVE)*, some providers prefer injecting local anesthetic first, so that the skin preparation can proceed while the anesthetic is taking effect. If this is done, the skin at the injection site should be disinfected with alcohol or iodine prior to injection. Alternatively, injecting anesthesia after skin preparation may help ensure compliance with the drying time requirement.
  - If adhesions or phimosis prevent the provider from easily retracting the foreskin, local anesthetic should be administered and given time to take effect **prior** to retracting the foreskin or separating adhesions and commencing skin preparation.
  - For device-based circumcision methods requiring topical anesthesia, the topical anesthetic agent needs to be applied in accordance with its manufacturer’s instructions for use (IFU) and those of the circumcision device, taking care to ensure anesthetic has had time to take effect before attempting to separate any adhesions. In some cases this may require 30 minutes. IFUs are frequently updated, and providers should ensure they are utilizing the current version.
5. Prepare the client’s skin for circumcision using an aqueous-based antiseptic solution of either povidone-iodine (7.5% - 10%) or chlorhexidine gluconate (2% - 4%) (WHO Essential Medicine List).
6. Skin preparation with antiseptic should occur in this order:
- a. Glans and inner foreskin: Holding the penis with a gauze swab, retract the foreskin in order to clean the glans, as well as the retracted inner foreskin.
    - i. In the case of adhesions, see box above for anesthesia timing. Adhesions may be separated by gently swiping the area with a clean gauze swab or with forceps, depending on adhesion strength. As above, **do not touch the sterilized kit or tray of instruments again** until gloves have been removed, hands cleaned, and a new pair of sterile gloves have been applied (*details in Steps 8 and 9*).
    - ii. If at any point the client experiences a reaction to povidone-iodine (itching, burning, or swelling), rinse the area thoroughly until no antiseptic is visible, and wait 1-2 days or until reaction has resolved to try chlorhexidine gluconate.
  - b. Outer foreskin: Let the foreskin return to its natural position over the glans, then clean the outer foreskin.
  - c. Shaft and peripheral genital area: Proceed to apply antiseptic to the shaft of the penis, then move out to the periphery, including the scrotum, the adjacent areas of the thighs and the lower part of the abdomen (suprapubic area).

- d. Repeat steps “a” through “c.” two more times for a **total of three antiseptic applications**, each time **in the same order**.
  - e. Once finished with the three antiseptic applications, take care to not let the penis or glans touch any skin that has not been cleaned with antiseptic. This can be achieved by wrapping sterile gauze around the penis or placing the penis down only on cleaned skin.
  - f. Additional information about skin preparation from the glans and shaft to the periphery, including a photograph, will be available in the *Manual for Male Circumcision Under Local Anaesthesia for Providers Serving Adolescents and Adults, 2<sup>nd</sup> Edition* (publication expected in mid-2017)
7. Allow the antiseptic to **dry completely** (at least TWO minutes both for povidone-iodine and chlorhexidine gluconate) before proceeding with any other steps. This permits the antiseptic to be in contact with the skin long enough for adequate antimicrobial activity to occur. Note: Drying time is only required after the third full application of antiseptic.
  8. Remove the gloves used during skin preparation. Wash hands with soap and water and dry thoroughly, or use 3-5 ml (enough to fill the palm of a hand) of alcohol-based rub on visibly clean hands for 20-30 seconds and allow to dry.
  9. Put on a sterile pair of gloves for the circumcision procedure.
  10. Antiseptic, whether povidone-iodine or chlorhexidine gluconate, should remain on the skin and should **not** be washed off while the client is at the VMMC site. This may minimize chances of infection. However, any soiling with blood can be cleaned from the skin with additional antiseptic or saline solution after the procedure, leaving the rest of the antiseptic intact.
    - a. Inform client that antiseptic is not harmful to the skin and does not need to be washed off and, if applicable, that the orange-yellow color of povidone-iodine is normal. Instruct him to keep the wound dry while the dressing is in place, in accordance with the post-procedure instructions for the specific circumcision method.
  11. Document in the client’s record that the full skin preparation regimen was completed three times and indicated wait time for drying took place. If there is not a designated field in the record for doing so, write it in the margin.

It is important that the client receives and understands instructions on post-procedure wound care, including the need to keep wound dressings dry, and not to apply home remedies or traditional medicines (herbal remedies, ash, or animal dung) to the wound. These can increase chances of infection, including infection causing tetanus, which can be fatal. See *client information brochure*.

#### SKIN PREP SUMMARY

- CLEAN WITH SOAP AND WATER ●
- 3 APPLICATIONS OF ANTISEPTIC ●
- ALLOW ANTISEPTIC TO DRY AFTER THIRD APPLICATION (≥2 MINUTES) ●

## Note

*WHO Global Guidelines for the Prevention of Surgical Site Infection* (WHO 2016) provide recommendations on skin preparation. The authors of those guidelines were consulted in the development of this SOP and agreed the indications for antiseptic use in male circumcision procedures differ slightly from the general surgical recommendation (i.e., antiseptic for VMMC is to be aqueous-based and can be either povidone-iodine or chlorhexidine gluconate).

## References

*Global Guidelines for the Prevention of Surgical Site Infection*. Geneva: World Health Organization, 2016.

*Manual for Male Circumcision Under Local Anaesthesia for Providers Serving Adolescents and Adults*, 2<sup>nd</sup> Edition. Geneva: World Health Organization (publication expected mid-2017)

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