### SOP on Hand Hygiene

#### 1. Purpose

To define a framework on Hand hygiene to prevent healthcare associated infections.

#### 2. Scope

This Policy and Procedure is applicable to Doctors, Nurses, Paramedical staff, and Housekeeping Staff (who deals with Bio Medical Wastes) tes

#### 3. Definition

Hand Hygiene - Hand hygiene (HH) is the most effective means of preventing and controlling the spread of infections among patients, staff and visitors. HH includes either hand washing (i.e., the removal of microorganisms with soap and running water), and/or hand antisepsis with an alcohol-based hand rub (ABHR)Hand Hygiene removes bacteria that colonize the upper layers of skin and are acquired during direct contact with patients and contaminated surfaces in the environment.

#### 4. Responsibility

- 4.1 Medical Administration is responsible to ensure and monitor compliance of this Policy and Procedures.
- 4.2 Doctors, Nurses, Paramedical staff, Housekeeping Staff (who deal with Bio Medical Wastes) are responsible to comply with this Policy and Procedure.
- 4.3 Infection Control Team, Nursing Superintendent, Nursing Supervisors, is responsible to monitor compliance level of this Policy and Procedure through rounds and internal audits.

#### 5. Policy

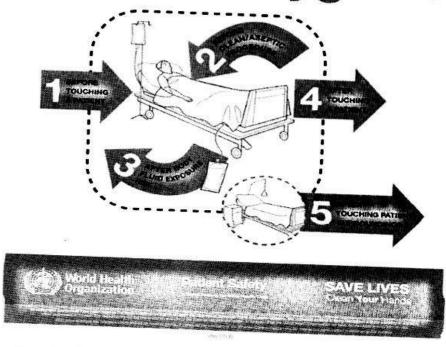
- 5.1 To ensure that Hand hygiene is maintained & improved in order to prevent health care associated infections.
- 5.2 To provide readily accessible alcohol based hand rubs at the point of care.
- 5.3 To educate Doctors, Nurses, Paramedical staff, Housekeeping Staff on correct hand hygiene techniques.
- 5.4 To provide display of promotional hand hygiene posters in the work place.
- 5.5 To measure hand hygiene compliance through observational monitoring and to give feedback to Doctors, Nurses and paramedical staff.
- 5.6 To give priority to improved hand hygiene adherence and to provide appropriate leadership, administration support and required resources

#### 6. Procedures

### 6.1 Indications for hand washing and hand antisepsis

- 6.1.1 Hands must be decontaminated
- Immediately after each episode of direct patient contact or care including clean / aseptic procedures.
- Before handling an invasive device (regardless of whether or not gloves are used) for patient care.
- After contact with body fluids or excretions, mucous membranes, non-intact skin, or wound dressings
- d. If moving from a contaminated body site to a clean body site during patient care.
- e. After contact with inanimate objects (including medical equipment) in the immediate vicinity of the f. After removing gloves

# **Your 5 Moments** for Hand Hygiene



- 6.1.2 Use an alcohol based hand rub for decontamination of hands before and after direct patient contact, except in the following situations when soap and water must be used:
  - When hands are visibly soiled or potentially contaminated with body fluids, and
  - When caring for patients with vomiting or diarrheal illness, regardless of whether or not gloves have been worn.
  - c. Before starting work, before entering or , before eating, after using a rest room and in all cases where hands are visibly soiled.

#### 6.2 Hand hygiene technique

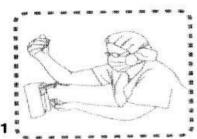
- 6.2.1 Apply a palmful of the product and cover all surfaces of the hands. Cover all surfaces of hands and fingers by seven step techniques, until hands are dry.
- 6.2.2 When washing hands with soap and water, wet hands with water and apply the amount of product necessary to cover all surfaces. Vigorously perform rotational hand rubbing on both palms and interlace fingers to cover all surfaces. Rinse hands with water and dry thoroughly with a single use towel. Use running and clean water whenever possible. Use towel to turn off faucet.
- 6.2.3 Make sure hands are dry. Use a method that does not recontaminate hands. Use of disposable cloth towels is preferable.

### 6.3 SURGICAL HAND RUB OR HAND SCRUB POLICY & PROCEDURE PURPOSE:

- 6.3.1 **Purpose:** The purpose of the surgical hand rub or hand scrub is to remove debris and transient microorganisms from the nails, hands, and forearms, to reduce the resident microbial count to a minimum, and to inhibit rapid rebound growth of microorganisms.
- 6.3.2 **POLICY:** An antiseptic surgical hand scrub or antiseptic hand rub shall be performed before gowning and gloving preoperatively by all personnel performing or assisting with surgical procedures. Fingernails must be trimmed short and be free of artificial nails and enhancements. Hands and forearms must be free of open lesions and breaks in skin integrity.
- 6.3.3 **PROCEDURE** for FDA-approved, alcohol-based, antiseptic surgical hand rub with documented persistent and cumulative activity approved for surgical hand antisepsis:
  - 1. Pre-wash hands, nails and forearms prior to each alcohol-based surgical hand rub
    - a) Remove all jewellery from hands and forearms
    - b) Don a surgical mask c. Wet hands and forearms
    - c) Apply sufficient soap to work up lather
    - d) Wash from fingertips to three inches above the elbows
    - e) Clean nails and subungual areas with disposable nail cleaner under running water
    - f) Dry hands and arms thoroughly.

#### 2. Surgical Hand rubbing Technique

- Use an alcohol-based hand rub (ABHR) product for surgical hand preparation, by carefully following the technique illustrated in Images 1 to 17, before every surgical procedure.
  - If any residual talc or biological fluids are present when gloves are removed following the operation, hand wash with soap and water.



Put approximately 5ml
(3 doses) of ABHR in the
palm of your left hand, using
the elbow of your other arm
to operate the dispenser.



Dip the fingertips of your right hand in the hand rub to decontaminate under the nails (5 seconds).











Images 3-7: Smear the hand rub on the right forearm up to the elbow. Ensure that the whole skin area is covered by using circular movements around the forearm until the hand rub has fully evaporated (10-15 seconds).











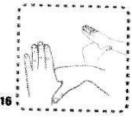
Images 8-10: Now repeat steps 1-7 for the left hand and forearm.

- Put approximately 5ml (3 doses) of ABHR in the palm of your left hand as illustrated, to rub both hands at the same time up to the wrists, following all steps in images 12-17 (20-30 seconds).
- Cover the whole surface of the hands up to the wrist with ABHR, rubbing palm against palm with a rotating movement (image 12)











Rub the back of the left hand, including the wrist, moving the right palm back and forth, and viceversa

Rub palm against palm back and forth with fingers interlinked.

Rub the back of the fingers by holding them in the palm of the other hand with a sideways back and forth movement.

Rub the thumb of the left hand by rotating it in the clasped palm of the right hand and vice versa

When the hands are dry, sterile surgical clothing and gloves can be donned.

### PROCEDURE for surgical hand asepsis using soap and water:

- 1. Remove all jewellery from hands and forearms
- 2. Don a surgical mask
- 3. Prepare for the surgical hand asepsis
- 4. Adjust water temperature
- 5. Keep arms level and well away from body; keep hands up above the elbows for the duration of the
- 6. Remove brush from wrapper; use the soft nonabrasive sponge
- 7. Pre-wash the hands and forearms with approved soap and water
- 8. Wet hands and forearms
- 9. Apply sufficient water to sponge and work up lather
- 10. Wash from fingertips to three inches above the elbows
- 11. Clean nails and subungual areas with disposable nail cleaner under running water
- 12. Discard nail cleaner in receptacle
- 13. Rinse hands and arms thoroughly
- 14. Moisten sponge and begin surgical hand asepsis. Apply 3-5 ml of antimicrobial soap if the sponge does not contain the soap solution. Start at the fingertips and nails.
- 15. Apply product to all sides of each digit, including web spaces (a counted brush stroke method may also be used) between fingers
- 16. Wash the palm and back of the hand using a circular motion
- 17. Repeat for the second hand; each hand will be washed for one minute
- 18. Wash the arm on all sides, up to and including the elbow and antecubital spaces, to a level of three inches above the elbow

- 19. Wash each lower forearm for 30 seconds; wash each upper arm for 30 seconds
- a. Hold hands above the level of the elbows while scrubbing. Water flows from the level of the elbows while scrubbing. Hands and arms are now the clean area and are held away from the body.
- b. Rub the back of the left hand, including the wrist, moving the right palm back and forth, and vice versa Rub palm against palm back and forth with fingers interlinked. Rub the back of the fingers by holding them in the palm of the other hand with a sideways back and forth movement. Rub the thumb of the left hand by rotating it in the clasped palm of the right hand and vice versa When the hands are dry, sterile surgical clothing and gloves can be donned. held away from the body. Avoid splashing soap or water on scrub attire.
- 20. Discard the sponge in the wastebasket after the wash.
- 21. Rinse hands and arms from the fingertips to above the elbow; never rinse back and forth or rinse from elbows to fingers Proceed to the operating rooms for gowning and gloving while holding arms upright bent at the elbow.

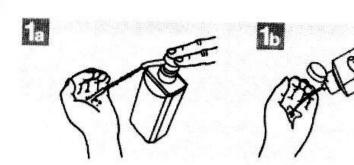
#### 6.4 Health-care worker educational training

- 6.6.1 To educate health-care workers about the type of patient-care activities that can result in hand contamination and about the advantages and disadvantages of various methods used to clean hands.
- 6.6.2 To monitor health-care worker's adherence to recommended hand hygiene practices and provide them with performance feedback.
- 6.6.3 Periodically monitor and record adherence as the number of hand-hygiene episodes performed by personnel/number of hand-hygiene opportunities.
- 6.6.4 Adherence to hand hygiene compliance to be monitored once in a month in key areas.
- 6.6.5 To encourage partnerships between patients, their families and health-care workers to promote hand hygiene in health care.
- 6.6.6 Patients should be offered the opportunity to clean their hands before meals; after using the toilets, commode or bedpan / urinal and at other times as appropriate.

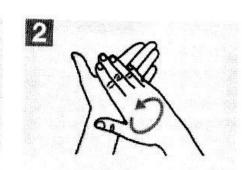
Hand Hygiene	Usage	Technique
Alcohol-Based Hand Rub (ABHR)	Alcohol is ineffective if hands are visibly soiled. Faster and more effective than hand washing when hands are not visibly soiled Mechanical action of rubbing is important to kill bacteria Less drying to hands than hand washing	Should contain 70-90% alcohol 1-2 pumps and enough product so that it takes 15 seconds to dry Spread rub over all surfaces of hands concentrating on fingers, backs of hands and base of thumbs Continue rubbing until product is dry (15 sec) Do not use ABHR immediately after hand washing ABHR not effective for C. difficle spores
Hand Washing	Mechanical action of washing, rinsing and drying removes most bacteria, viruses Preferred when hands are visibly soiled	Wet hands and apply soap with a vigorous lather of all surfaces for a minimum of 15 seconds Use a rubbing motion to rinse soap from hands Dry hands thoroughly by blotting with a paper towel.

## RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

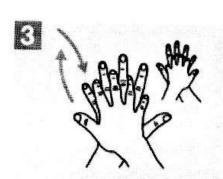
Duration of the entire procedure: 20-30 seconds



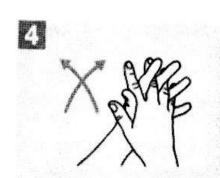
Apply a palmful of the product in a cupped hand, covering all surfaces;



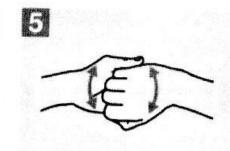
Rub hands palm to palm;



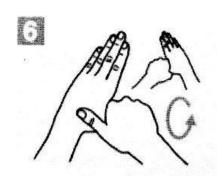
Right palm over left dorsum with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



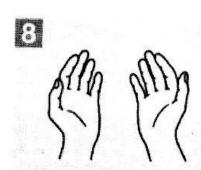
Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



Once dry, your hands are safe.

#### **HOW TO HANDWASH?**

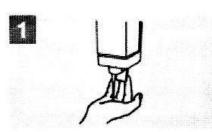
### WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB



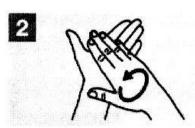
Duration of the entire procedure: 40-60 seconds



Wet hands with water;



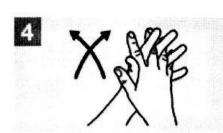
Apply enough soap to cover all hand surfaces;



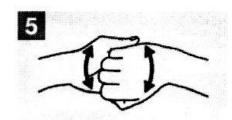
Rub hands palm to palm;



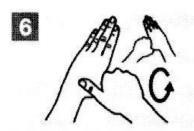
Right palm over left dorsum with interlaced fingers and vice versa;



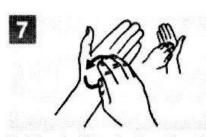
Palm to palm with fingers interlaced;



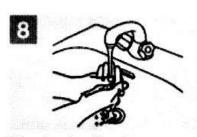
Backs of fingers to opposing palms with fingers interlocked;



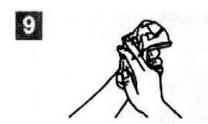
Rotational rubbing of left thumb clasped in right palm and vice versa;



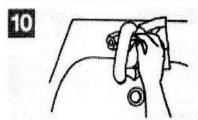
Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



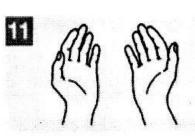
Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.