

**SCRUBBING, GOWNING AND GLOVING STANDARD
 OPERATING PROCEDURE (SOP) – BURTON SITES ONLY**

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REVIEW AND AMENDMENT LOG

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SCRUB, GOWNING AND GLOVING PROCEDURE

1: Introduction & Outcome

Standard

There is a standardised procedure for surgical hand antisepsis, gowning and gloving which is based on current evidence, best practice and validated research. The patient's surgical outcome is enhanced by the promotion of an aseptic environment.

Surgical Hand Antisepsis

Surgical Hand antisepsis is an extension of hand washing: scrubbing is undertaken immediately prior to donning sterile gloves before participating in a surgical or invasive procedure, in order to reduce the risk of cross infection in the event of glove perforation. The aim of the surgical hand antisepsis is to remove debris and transient micro-organisms, to reduce resident micro-organisms to a minimum and to inhibit rapid rebound, for example, growth on hands, nails and forearms of the surgical personnel.

2: Prior to Scrub Procedure

In order to minimise cross infection all staff should

- Apply a fresh face mask. The mask should be tied securely ensuring that it covers both nose and mouth and it is important that the mask neither too tight nor too loose.
- Cover all hair under a theatre cap.
- A plain wedding band does not require removal.
- Ensure that nails are socially clean, short and without polish (No artificial acrylic and gel nails).
- Ensure that there is sufficient surgical detergent.

Surgical Anti-microbial Solutions

Anti-microbial solutions must be antiseptic or alcohol based, fast acting and have a broad spectrum of action and a residual effect (AORN 2007). Follow manufactures instructions. All surgical preparations should be dated on opening and discarded after 7 days.

Face-Eye Protection

These provide a protective barrier for the surgical team. There is an anticipated risk of splash from blood and body fluid, so therefore the use of a face mask and eye protection must be used.

3: Scrub Procedure

Using a systematic method of handwashing ensures an effective way of cleansing all areas of the hands and arms (Gould 2000). Surgical Hand antisepsis must be performed before donning gloves for clinical invasive procedures.

3.1: Washing

1. Adjust the temperature and flow of the water and stand as close to the scrub sink as possible.
2. Wet hands and arms under running water and apply antiseptic detergent, amount as per manufacturers instructions.
3. The first wash should encompass the hands and arms to the elbows, using a systematic method to cover all areas.
4. The hands must remain above the level of the elbows and away from theatre attire to avoid contamination from splashing.
5. The six steps of handwashing should be used for surgical antisepsis and social handwashing (NATN 2004).
 - Rub palm to palm
 - Rub right palm over left dorsum and left palm over right dorsum
 - Rub palm to palm with fingers interlaced
 - Backs of fingers to opposing palms with fingers interlocked
 - Rotational rubbing of the right thumb clasped in left palm and vice versa
 - Rotational rubbing backwards and forwards with clasped fingers of the right hand in left palm and vice versa
6. Rinse hands and arms under running water from fingertips to elbow.
7. Nails can be cleaned using a disposable nail pick or the scrubbing brush under running water. The scrubbing brush should be used to clean the palms of the hand and nail area, over use can cause skin damage and increased skin cell shedding.
8. Rinse from fingertips to elbow and reapply antiseptic detergent.
9. Subsequent washes should encompass two thirds of the forearms to avoid compromising the cleanliness of the hands.
10. After the final rinse, hands should be kept elevated to drain off excess water. The taps should be turned off using the elbows. Vigorous shaking of the hands to dispel water should be avoided.
11. The outer wrapper of the gown pack should be opened by the circulating person, the inner wrapper by the scrub person.

During the scrub procedure ensure that hands are always kept above the level of the elbows and away from surgical attire.

3-5 minutes should be spent on the scrub procedure, the first wash to the elbows taking 1-2 minutes and the subsequent washes to the forearms 2-3 minutes.

When scrubbing for consecutive cases there is no need to use a nail pick or scrub brush after the initial scrub.

During certain lists and in emergency situations the use of hand rub between cases after an initial first full scrub up is acceptable as long as there has been no contamination of the hands between the cases.

3.2: Drying

1. The hands must remain above elbow level.
2. Take the sterile towel from the gown pack ensuring that it does not come into contact with the scrub suit or anything else unsterile.
3. Dry hands by blotting the excess water and using a rotating corkscrew motion, dry wrists and lower arms.
4. Always work away from the fingertips towards the elbows.
5. Use 1 towel per arm.

3.3: Glove Donning (Closed Method)

- The closed method of gloving is the preferred option for donning sterile gloves (NATN 2004)
 - Gloves should be taken from the packet with hands protected inside the gown and opened on to a sterile surface
 - Left Hand**
 1. Pick up left glove.
 2. Lie it palm to palm with glove fingers pointing towards the elbow.
 3. Hook left thumb (inside the gown) over the cuff of the glove.
 4. Peel glove over and on to the left hand.
 5. Grip glove with the left thumb and whilst doing so keep pulling the glove until it extends beyond the wrist.
 6. Pull the glove onto the left hand using right hand (which should still be protected by the sleeve of the gown).
 7. Grasp both the glove cuff and sleeve as you pull back, this allows fingers and hand to emerge from the sleeve.

8. Keep right hand within the sleeve of the gown.
9. Keep going until the glove fits snugly around the fingers.

Right Hand

1. Pick up the right glove with the left hand.
2. Lie it palm to palm with glove fingers pointing towards the elbow.
3. Repeat the 'peeling procedure'.
4. Pull the hand through remembering to grasp both glove and underlying sleeve as doing so.
5. Ensure a good fit by adjusting both gloves so there are no wrinkles and the gloves are comfortable.

Check the gloves for any perforations.

Once gloves are on, hold hands up and in front of the chest to avoid contamination.

Left handed people may find it easier to put on the right glove first, in this case just switch the process round and follow LEFT HAND INSTRUCTIONS for the right hand and vice versa.

3.4: Tips

- If the hands start to feel numb within 10 minutes of donning the gloves, try a half size bigger.
- If hands develop a rash or are itching on the removal of the gloves Occupational Health guidance may be required.
- If gloves are torn or punctured, take off the gloves and start again.
- Abrasions and lesions must be covered with a waterproof dressing. If there is an infection, do not scrub.

When gloves require changing intraoperatively due to a puncture or inadvertent contamination, the glove must be removed in a way that avoids further contamination. A new glove may be donned with the assistance from a member of the surgical team.

4: Intraoperative and Postoperative Procedure Protocol

When gloved and gowned, the area of sterility is:

- Gloved hands and forearms.
- Below the nipple to waist level. Hands must be kept above waist level and below shoulder level and should be visible at all times to avoid inadvertent contamination.

When not actually involved in a sterile procedure, stand with hands in the sterile area.

5: Removing Gown and Gloves

At the end of a procedure, gowns and gloves are treated as clinically contaminated or clinical waste.

1. Gown should be undone by the Circulating Person or someone who does not have contaminated hands.
2. Once released the gown should be pulled forward over the gloved hands folding it in on itself.
3. The gown should be placed into the patient identification numbered clinical waste bag.

To avoid contamination of the hands, gloves should be removed by ensuring that the glove surface comes into contact with the glove and the skin with skin.

Face mask and eye protection should be changed after each procedure and if reusable cleaned between cases.

Hands should be washed thoroughly once gown and gloves have been removed.

6: References

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