

# Scrubbing, Gowning and Gloving Policy (Maintaining a Sterile Field)

<b>Approved By:</b>	<b>Policy &amp; Guideline Committee</b>
<b>Date Originally Approved:</b>	<b>30 May 2014</b>
<b>Trust References:</b>	<b>B7/2014</b>
<b>Version:</b>	<b>V4</b>
<b>Supersedes</b>	<b>V3 - July 2019</b>
<b>Author / Originator(s)</b>	<b>Jo Hollidge –Team Leader ITAPS Development Team Jane Aires – ODP Placement and Programme Coordinator</b>
<b>Name of Responsible Committee/Individual:</b>	<b>Jason Loughran – Head of Nursing, ITAPS CMG</b>
<b>Latest Date:</b>	<b>19 August 2022 – Policy &amp; Guideline Committee</b>
<b>Next Review Date:</b>	<b>September 2025</b>

## CONTENTS

Section		Page
1.	Review dates & details of changes made to Policy	2
	Key Words	3
	Introduction and Overview	4
2.	Policy Scope – Who the Policy applies to and any specific exemptions	4
3.	Definitions and Abbreviations	4
4.	Roles – Who Does What	4
5.	Policy Implementation and Associated Documents – What needs to be done?	5
6.	Education and Training	6
7.	Process for Monitoring Compliance	8
8.	Equality Impact Assessment	9
9.	Supporting References, Evidence Base and Related Policies	9
10.	Process for Version Control, Document Archiving and Review	10

Appendices		Page
1	Procedure for Scrubbing	11
2	Procedure for Gowning	15
3	Procedure for Gloving (Closed Method 1 and 2)	18
4	Procedure for Removing Gowns and Gloves	22
5	Procedure for Gloving another Person	24
6	Procedure for Double Gloving Procedure	26
7	Procedure for Scrubbing using with an alcohol-based hand rub formulation	27
8	UHL Hand Washing Guideline	29
9	<b>Latest Accepted National Policy: (July 2019) National Infection Prevention and Control Manual: Appendix 3 – Best Practice – Surgical Scrubbing</b>	30

### REVIEW DATES AND DETAILS OF CHANGES MADE DURING THE REVIEW

#### 2022

- Addition of (Maintaining a Sterile Field) to Policy title
- Update to Author details
- Update of Responsible Committee/Individual
- Changes on Page 7: Change from 'Theatre Etiquette Policy' to the 'Theatre Code of Conduct' Section 5.4

- Page 8 – Update to Equality Impact Assessment section to include reference to changes agreed within the Trust to wearing the Kara bracelet in Theatres/scrubbing.
- Page 10: Section 7.2 - Audit standards are highlighted as such within this document. This does not preclude 'Caring at Its Best' observational audits which are ongoing. Audit of compliance to this policy will take place annually after implementation and at intervals thereafter as determined by the EQB/QAC. Changed to now refer to CMG IPOG and Trust TIPAC
- Page 11: Added the date 2022 to the NIPCM appendix 3 (to reflect updates this year)
- 3.4 and 3.5 were duplicated - 3.5 deleted
- Addition of Legal Liability section
- Appendix 1, - Addition to Point 4 to reflect revision to UHL Uniform Policy: Now includes the following – *'Remove all hand/wrist jewellery (a single, plain metal finger ring or ring dosimeter (radiation ring) is permitted but should be removed (or cleaned and moved up) during hand hygiene); bracelets or bangles such as the metal Kara which are worn for religious reasons should be cleaned and pushed as high up the arm away from the wrist as practically possible (while still allowing comfort for the wearer) and secured in place to enable effective hand hygiene/surgical scrubbing which includes the wrists (NHSEI 2019)'*
- Page 14 Section 12 – Reference to Appendix 9 has been added after the 'Step 2 (Surgical Hand Scrubbing) title and reference to appendix 8 deleted.

## **2019**

- Section 2 policy Scope – Addition of specific staff groups that policy applies to.
- Section 3 definitions – Addition of 'Interventional Department'
- Section 4 Roles – Addition of scrub competency assessment.
- Section 6 Education – Addition of latest guidance comment re National Infection Prevention and Control Manual: Appendix 3 – Best Practice – Surgical Scrubbing
- Section 7 Process for monitoring – updated as per current practice and CMG meetings.
- Section 9 References – Addition of reference to National Infection Prevention and Control Manual: Appendix 3 – Best Practice – Surgical scrubbing

## **KEY WORDS**

---

*Scrub, Scrub Policy, Hand Scrub, Scrub and Gloving*

## 1 Introduction and Overview

---

- 1.1 This document sets out the University Hospitals of Leicester (UHL) NHS Trusts Policy and Procedures for Scrubbing, Gowning and Gloving where all invasive procedures are taking place.
- 1.2 The contents of this policy reflect best practice and amalgamation of professional guidance from national bodies representing Surgeons, Anaesthetists, Operating Department Practitioners, Nurses and Infection Prevention team.

## 2 POLICY AIMS

---

- 2.1 The aim of this policy is to provide best evidence based practice standards to all healthcare professionals who are required to perform hand scrub, gowning and gloving for all invasive procedures. All healthcare professionals are to follow this policy in order to protect patients from the risk of infection.
- 2.2 This policy relates to all staff that required to perform a scrubbing, gowning and gloving process to maintain a sterile field whilst performing and or assisting with invasive and open procedures.
- 2.3 Staff groups will include Surgeons, Anaesthetists, Operators and Interventional Teams such as Operators within the Catheter Labs, Radiology and vascular Access. Scrub practitioners will include Band 3 and 4 Theatre Assistant Practitioners, Nurses and Operating Department Practitioners. This list is not exhaustive and will include all staff that are required to gown and glove to maintain a sterile field. (For e.g. those inserting central lines and Oncologists administering intrathecal chemotherapy)

## 3 Definitions and Abbreviations

---

- 3.1 Any UHL employee whose role involves the preparation or performing or assisting with an invasive procedure which may be in a theatre, interventional department or ward settings.
- 3.2 Hand Scrubbing/surgical hand antisepsis/antiseptic surgical scrub is defined as an extension of hand washing (AfPP 2007) performed before donning sterile attire preoperatively (AORN 2008) which may also reduce Healthcare Associated Infections and Surgical Site Infections (WHO, 2008).
- 3.3 Hand washing refers to washing hands with plain or antimicrobial soap/agent and water (WHO, 2008).
- 3.4 **Scrub Practitioner:** the term is used for the authorised professional; who assists the Operating Surgeon or Operator, handing the surgical instruments and other items.
- 3.5 **Circulating Practitioner:** An authorised person working under the direct supervision of a Registered Health Professional assisting with the care of patients.

## 4 Roles

---

### 4.1 Medical Director and Chief Nurse are responsible for:

Ensuring that appropriate management mechanisms are in place across the Trust to ensure that the Scrubbing, Gowning and Gloving policy is adhered to by all listed in **Section 3.**

**4.2 ITAPS and other CMG Management Team are responsible for:**

Ensuring all their staffs are made aware of this policy through local induction and assessed for competency via the 'Scrub Competency LCAT Assessment'

**4.3** CMGs are to ensure that there are processes and resources to provide education a assessment of competency for all staff that are involved in interventional and invasive procedures.

**4.4** CMGs to ensure compliance with any associated audit of clinical practice and competence.

**4.5 HoN / DHoN / Matron / Theatre Team Leader / Lead Clinician / Infection Prevention Team Responsible for:**

**4.6** Ensuring patient safety within the operating department environment by making sure that authorised staffs receive the appropriate training, supervised practice and assessment of competence.

**4.7** Maintaining accurate and up to date training records and any competence reassessment.

**4.8** Contributing to all audit requirements.

**4.9** Escalation processes may need to be implemented to support team members who could be challenged about implementing the policy, within what may occasionally be a challenging and stressful environment. Matrons, team leaders, Floor Control and theatre in charge staff will support the implementation of this policy.

**Staff responsibility**

**4.10** To seek support if necessary from line manager and to carry out the activity as an integral part of the key responsibilities within their role.

**4.11** Successfully complete all appropriate education and training as detailed in section 7.

**4.12** Maintain competence and undertake any refresher training as necessary

**5 POLICY Implementation and Associated Documents.**

**This policy is supported by the standards, processes and procedures listed in Appendix 1 to 9.**

**These must be used in conjunction with this policy**

**5.1** Staff must not undertake invasive procedures unless they have scrubbed, gowned and gloved in accordance with this policy except in emergency situations. In extreme circumstances such as life and limb: it is acceptable to don sterile gloves and proceed. Every effort must be made to protect both patient and staff from contamination and potential infection. It is realized that in extreme life and limb circumstances, the balance of risk to provide lifesaving treatment may override all steps of this policy

on such rare occasions.

**5.2** All equipment must be assembled before starting the scrub procedure

**5.3** Scrub staff who become contaminated must take immediate action to prevent infection risk

**5.4** All staff must use this policy in line with the following documents:

- Theatre Code of Conduct – (Distributed and monitored by ITAPS Education Team)
- Scrub Assessment Competency Document & LCAT Assessment

**5.5** Staff within UHL working in non theatre environments but involved with invasive procedures that require them to undertake the 'scrub' role must make themselves familiar with this policy. It is the responsibility of Departmental Managers to refer staff to the policy and records of compliance and training must be kept locally for such areas across the Trust.

## **6 EDUCATION AND TRAINING REQUIREMENTS**

6.1 All staff defined in section 3 must read and sign a confirmation sheet to substantiate they have read and understood this policy. All staff must undertake the related e- learning package training every three years and be assessed if identified as needed.

6.2 All students/trainees must be supported and supervised to undertake this process under direct supervision or until assessed and deemed competent in all aspects.

6.3 This will form part of essential to job role training and assessment for theatre practitioners. Training will be supported by the ITAPS education team, Matrons and Team Leaders.

6.4 The practitioner must accept responsibility for updating knowledge and skills to maintain their own and patients' safety when undertaking this role and skills, for example when new products or gloves are in use.

### **In Addition:**

All relevant employees must be familiar with and demonstrate an understanding of the following appropriate bodies and documents relevant to their discipline.

6.5 Healthcare Professions Council (HCPC) (Standards of conduct) (2013)

[www.hpc-uk.org](http://www.hpc-uk.org)

6.6 Association for Perioperative Practice *NATN Standards and Recommendations for safe Perioperative Practice* (Association for Perioperative Practice 2007)

6.7 The Code. Professional Standards of Practice and Behavior for Nurses and Midwives (NMC 2015)

[www.nmc-uk.org/code](http://www.nmc-uk.org/code)

6.8 AAGBI Guideline, (Gemmel *et al*, 2008) Infection Control in Anaesthesia.

[www.aagbi.org](http://www.aagbi.org)

6.9 Royal College of Surgeon Guideline (2012)

[www.rcseng.ac.uk/publications-clinical-guidelines](http://www.rcseng.ac.uk/publications-clinical-guidelines)

6.10 National Infection Prevention and Control Manual: Appendix 3 – Best Practice – Surgical Scrubbing (April 2022)

<http://www.nipcm.hps.scot.nhs.uk/appendices/appendix-3-best-practice-surgical-scrubbing/>

## 7 PROCESS FOR MONITORING COMPLIANCE

Element to be monitored	Lead	Tool	Frequency	Reporting Arrangements	Leads for acting on Recommendations	Change in practice and lessons to be shared
<b>Hands Scrubbing according to policy in all areas as per section 1.</b>	HoN, and Matron	Theatre Quality metrics.	Monthly and reported monthly	Reported to Corporate Nursing Team and reported via Chief Nurse to GRMC	HoN/Matrons/ Departmental Managers	Professional report to CMG Board and Matrons meeting.
		Quality and Safety report.	Monthly	ITAPS Quality and Safety Board. CMG Board.	Quality and Safety Manager, HoN, Divisional Team, Chair of Quality and Safety Boards	Theatre cross site Band 6/7 meeting.
		Incident reviews.	Weekly	Reported via ITAPS Board meeting / CMG Quality and Safety Board and EQB	Quality and Safety Manager, HoN, Divisional Team, Chair of Quality and Safety Boards	Theatre cross site Band 6/7 meeting.
<b>Education and Training</b>	HoN, Matron and Education team.	Theatre Preparation e-learning. Scrub LCAT Assessment	Initial assessment then three yearly updates	Reported locally at CMG meetings, education meetings and appraisals.	Team Leaders/Deputies. Education Team report to ITAPS Board.	TED Meetings ITAPS Education Meetings Clinical Skills Supervisors Meetings Theatre cross site Band 6/7 meeting.
		Hand scrubbing assessment document.	Initial assessment then three yearly updates.	Reported locally at CMG meetings, education and appraisals.	Education Team Team Leaders	TED Meetings ITAPS Education Meetings Clinical Skills Supervisors Meetings Theatre cross site Band 6/7 meeting.



- 7.2 Audit standards are highlighted as such within this document. This does not preclude 'Caring at its Best' observational audits which are ongoing. Audit of compliance to this policy will take place annually after implementation and at intervals thereafter as determined by the IPOG and TIPAC
- 7.3 The audit of adherence to this Policy will as a minimum be measured monthly by Senior Staff (Head of Nursing, Deputy Head of Nursing and Matrons) by undertaking the Theatre Quality Metrics.
- 7.4 The monitoring reporting route is through the HoN and ITAPS CMG 'Infection Prevention Operational Group'

## **8 Equality Impact Assessment**

8.1 The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs and beliefs.

8.2 As part of its development, an Equality Impact Assessment had been carried out in 2022 and resulted in (Sikh Bangles – Kara Bracelet) now not requiring removal and this is reflected within this Policy and the UHL Uniform Policy:

8.3 The metal Kara which are worn for religious reasons should be pushed as high up the arm away from the wrist as practically possible (while still allowing comfort for the wearer) and secured in place to enable effective hand hygiene/surgical scrubbing which includes the wrists (NHSEI 2019).

## **9 Supporting References, Evidence Base and Related Policies**

Policy and Procedures Cleaning and Decontamination for Infection Prevention and Control (B5/2006)

Hand Hygiene Policy and Procedures (B32/2003)

Personal Protective Equipment at work Policy

(B9/2004) Waste Management Policy and Guidance

(A15/2003) Uniform and Dress Code Policy (B30/2010)

Appraisal Policy for non-Medical Staff (B1/2009)

### **References**

AORN (2009) Perioperative Standards and Recommended Practices. Association of perioperative Registered Nurses, AORN inc.

Association for Perioperative Practice *NATN Standards and Recommendations for safe Perioperative Practice* (Association for Perioperative Practice 2007)

Association for Perioperative Practice (2010) Surgical Hand Antisepsis. [www.afpp.org](http://www.afpp.org) [Accessed on 12/01/2013]

Berguer R, Heller PJ. (2004). Preventing sharps injuries in the operating room. *Journal of American College of Surgeons*. Vol 199, pp 462-467.

Centers for Disease Control and Prevention. (1999) Guideline for prevention of surgical site infection. <http://www.cdc.gov/ncidod/dhqp/pdf/guidelines/SSI.pdf> [Accessed on 20/02/2013]

NICE Guideline 139 (2012) Infection Prevention and control of healthcare-associated infections in primary and community care. National Institute for Health and Clinical Excellence.

National Clinical Guideline Centre (2012) Infection: Prevention and Control of Healthcare-associated infections in Primary and Community Care. Clinical Guidelines: Methods, evidence and recommendations. Commissioned by the National Institute for Health and Clinical Excellence, Royal College of Physician, Royal College of Nursing, Royal College of Surgeon, Royal College of General Practitioners and the NHS Evidence.

National Collaborating Centre for Women's and Children's Health (2008) Surgical site infection prevention and treatment of surgical site infection. Clinical Guideline. NICE.

NHS Scotland (2012) Standard Infection Control Precautions Literature Review: Hand Hygiene: Hand washing in the hospital setting. Health Protection Scotland.

NHS Scotland (2012) Standard Infection Control Precautions Literature Review: Hand Hygiene Surgical hand scrubbing/rubbing in the hospital setting Health Protection Scotland.

Royal Marsden Manual of Clinical Procedures (2011) 8<sup>th</sup> Ed, Wiley – Blackwell.

Susan, M. and Garbutt, J. (2011) Hand Hygiene in the OR. Using evidence based practices. Infection Control. [www.ORNurseJournal.com](http://www.ORNurseJournal.com)

Tanner, J. and Parkinson, H. (2009) Double gloving to reduce surgical cross-infection (Review). The Cochrane Collaboration. The Cochrane Library, Issue 4. Wiley Publishers.

The Newcastle upon Tyne Hospitals NHS Foundation Trust (2010) Surgical Scrub, Gown and Glove Procedures. Guidelines for Infection Control in the Operating Department

National Infection Prevention and Control Manual: Appendix 3 – Best Practice – Surgical Scrubbing (2022)

<http://www.nipcm.hps.scot.nhs.uk/appendices/appendix-3-best-practice-surgical-scrubbing/>




## **10 Process for Version Control, Document Archiving and Review**

10.1 This document will be uploaded on SharePoint and available for access by Staff through Insite. It will be stored and archived through this system.

10.2 This document will be reviewed every three years or sooner in response to an identified risk issue or changes in national guidance

10.3 The updated version of the Policy will then be uploaded and available through Insite Documents and the Trusts externally-accessible Freedom of Information publication scheme. It will be archived through the trust PAGL system.

## Appendix 1

Procedure for Scrubbing		
No.	Action	Picture Guide as applicable
1.	All staff to be dressed in appropriate attire according to settings by following the Uniform Policy.	
2	Fingernails must be short, free from nail polish. Sculptured and artificial nails are not permitted.	
3	Staff with open cuts, weeping lesions or abraded skin should refrain from scrubbing until risk assessed accordingly by Team Leader or Matron.	
4	All staff to be bare below the elbow as per Infection Prevention Policy and Hand Hygiene Guideline. Scrub sleeves must be above the elbow. Remove all hand/wrist jewellery (a single, plain metal finger ring or ring dosimeter (radiation ring) is permitted but should be removed (or cleaned and moved up) during hand hygiene); bracelets or bangles such as the metal Kara which are worn for religious reasons should be cleaned and pushed as high up the arm away from the wrist as practically possible (while still allowing comfort for the wearer) and secured in place to enable effective hand hygiene/surgical scrubbing which includes the wrists (NHSEI 2019)	
5	The initial scrub process must last for at least 3 – 4 minutes.	
6	Ensure there is enough surgical hand scrub solution. Use only UHL approved scrub solution	
7	Wear mask and goggle/visor and plastic or lead apron as per PPE policy	





## Procedure for Scrubbing

- 8 Open the sterile gown pack and sterile gloves using ANTT technique.











- 9 Open tap and regulate flow with a suitable temperature of water.

## Procedure for Scrubbing






10	<p><b>Step 1 (Hand Wash/Social Hand Wash).</b></p> <p>Open the sterile scrub brush package and or nail pick and position them for easy access. Start hand wash (using the 9 steps, Appendix 8) and clean nails with brush. Use nail picks if nails are visibly contaminated. This only needs to be completed at the beginning of the session.</p>	
11	<p>Nail brushes should be used on nails only and not on hands or arms. Sponge section of the nail brush must not be used to scrub hands and arms.</p> <p>Discard brush and pick appropriately in clinical waste as per Waste Policy.</p>	
12	<p><b>Step 2 (Surgical Hand Scrubbing)</b></p> <p>Wet the hands and forearms to the elbows. Use several drops (5ml) or according to manufacturer's recommendation of surgical scrub solution. Work up a lather then wash the hands (See Appendix 9) and arms thoroughly to the elbows using a circular motion.</p>	 
13	<p><b>Step 3 (Rinse)</b></p> <p>Rinse hands and arms thoroughly, allowing the water to run from the hands to the elbows. Do not retrace or shake the hands and arms, let the water drip from them while keeping the fingers pointed upward.</p>	
14	<p><b>Step 4</b></p> <p>Repeat step 2 to mid forearm and rinse.</p>	
15	<p><b>Step 5</b></p> <p>Repeat step 2 to wrist and rinse.</p>	

## Procedure for Scrubbing

16	<p><b>Steps 6 – Hand Drying</b></p> <p>Stand back from the trolley and reach for the sterile hand towel from the top of the gown pack. Pick up a hand towel from the top of the gown pack.</p> <p>Grasp the towel and open it - do not allow the towel to touch any un-sterile object or un-sterile parts of the body.</p> <p>Hold hands and arms higher than the elbows, and keep arms away from the body.</p>	 
17	<p><b>Step 7</b></p> <p>Holding the towel with one hand, dry the other hand and arm with a blotting, rotating motion (Rubbing will disturb skin cells).</p> <p>Work from fingertips to the elbow; DO NOT retrace any area.</p> <p>Pick up the other the towel from the pack and dry the other hand and arm in the same manner as above. Discard the towel appropriately in clinical waste.</p>	
18	<p><b>Miscellaneous</b></p> <p>If there is no water supply, refer to Appendix 7.</p>	



Procedure / Process for Gowning		
No.	Action	Picture Guide
1.	Pick up the gown from the wrapper by grasping either side with both hands. Then step back from the trolley.	 
2	Hold the neck of the gown tightly at shoulder height, allow it to unfold being careful that it does not touch any unsterile objects.  Place arms into sleeves ensuring the sterile outer surface of the gown is not touched.	 
3	Slide arms further into the gown sleeves and when the fingertips are level with the nearside edge of the cuff, grasp the inside seam at the juncture of gown sleeve and cuff using thumb and index finger. Be careful that no part of the hand protrudes from the sleeve cuff.	



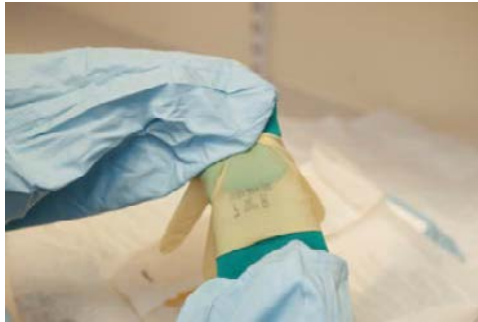
**Procedure / Process for Gowning**


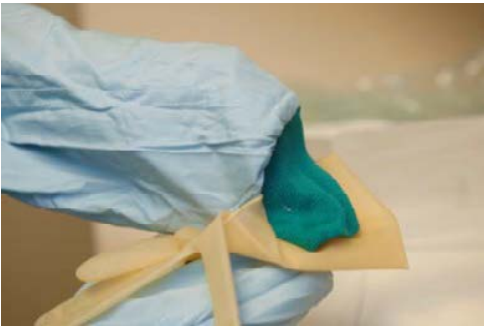


4	Take gloves from the circulator and don gloves as per method below (Closed Method 1)	
5	<p>The circulating person should assist at this point to position the gown over the shoulders if possible by grasping the inside surface of the gown. They can then adjust the gown over the scrub person's shoulders.</p> <p>The circulating person's hands should only be in contact with the inside surface of the gown.</p>	
6	<p>The circulating person secures the gown at the neck and back. The circulating person then secures the gown at waist level using the inner ties of the gown.</p>	 
<b>Securing/Tying of Gown Procedure</b>		
1	The scrub person will take hold of the belt tie secured at waist level and pull the left part of the belt out of the cardboard tab.	
2	The scrub person will pass the cardboard tab that still holds the belt tie to the circulating person.	
3	The circulating person will take hold of the cardboard tab being very careful not to touch the tie. The circulator moves to the side and circles behind the	

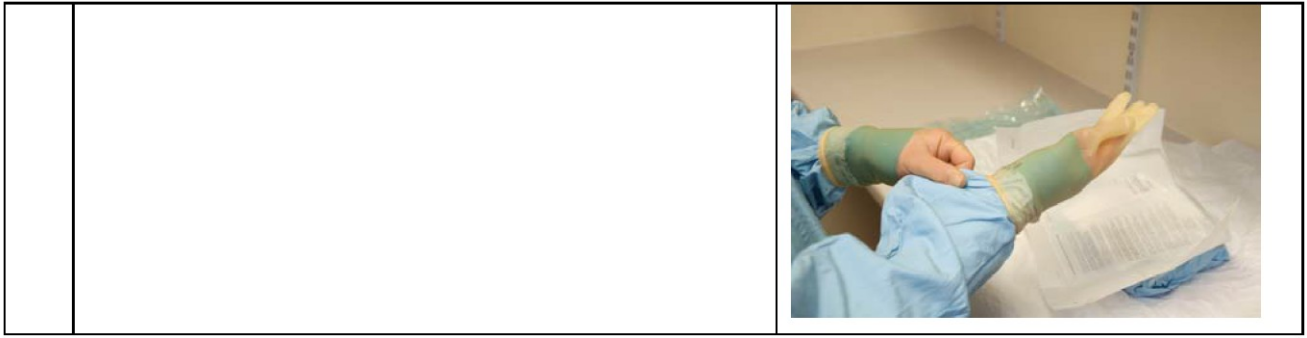


### Procedure / Process for Gowning

	scrub person. The scrub person will then turn to enable them to reach and retrieve the end of the tie	
4	When the circulating person has reached the other side of the scrub person, the scrub person will then take hold of the belt tie. They must be careful not to touch the cardboard tab. The circulating person pulls the cardboard tab away whilst the scrubbed person holds the belt tie tightly.	
5	The scrub person has both ends of the belt tie which is then tied at waist level.	





<b>Procedure for Gloving (Closed Method 1)</b>		
1	Open glove package with fingers remaining inside the gown sleeve and not beyond the cuff.	
2	Pick up the first glove with opposite sleeve-covered hand. Insert hand in glove while still covered with cuff as the other hand is holding and stretching the cuff of the glove.	 
3	Using the opposite sleeve covered hand, grasp both the glove cuff and sleeve cuff seam and pull the glove onto the hand	
4	Using the hand that is now gloved put on the second glove in the same manner. When gloving is completed no part of the skin has touched the outside surface of the gloves. Check to make sure that each gown cuff is secured and covered completely by the cuff of the glove. Adjust the fingers of the glove as necessary so that they fit snugly.	
<b>Procedure/Process for Gloving (Closed Method 2)</b>		
1	Open the inner package containing the gloves ensuring fingers do not go beyond the cuff. Pick up one glove by the folded cuff edge with the sleeve-covered hand. (Left hand picks up right glove. Right hand picks up left glove).	

2	<p>Place the glove on the opposite gown sleeve palm down, with the glove fingers pointing toward the elbow. The palm of the hand inside the gown sleeve must be facing upward toward the palm of the glove.</p>	
3	<p>Place the glove's rolled cuff edge at the seam that connects the sleeve to the gown cuff. Grasp the bottom rolled cuff edge of the glove with the thumb and index finger. While still holding the glove's cuff edge, grasp the uppermost edge of the glove's cuff with the other hand. Take care not to expose the bare fingers while doing this.</p>	
4	<p>Continuing to grasp the glove, stretch the cuff of the glove over the hand. Using the opposite sleeve covered hand, grasp both the glove cuff and sleeve cuff seam and pull the glove onto the hand. Pull any excessive amount of gown sleeve from underneath the cuff of the glove ensuring the gown cuff is covered by the gown.</p>	
5	<p>Using the hand that is now gloved put on the second glove in the same manner. When gloving is completed no part of the skin has touched the outside surface of the gloves. Check to make sure that each gown cuff is secured and covered completely by the cuff of the glove. Adjust the sleeves for comfort.</p>	



# Procedure for Removing of Gown and Gloves

## Appendix 4

Procedure for Removing Gown and Gloves		
No.	Action	Picture Guide
1	Scrub person unties the belt tie	
2	Circulating person unties the neck and back ties	
3	Scrub person grasps the gown at the shoulders and pull the gown forward and down over the arms and gloved hands.	
4	Holding arms away from the body fold the gown so that the outside is folded in and discard it into appropriate bag.	
5	Grasp the outer surface of one glove with the other gloved hand and pull off the glove. Discard the glove into the designated receptacle.	
6	Place the fingers inside the cuff of the remaining glove and pull glove off ensuring that outer surface of glove is not touched and discard. Remove mask and discard in clinical waste bag.	




### Procedure for Removing Gown and Gloves

7	<p>Removing face mask and visor.</p> <ol style="list-style-type: none"><li>1) Undo bottom tie</li><li>2) Undo top tie and discard immediately into clinical waste ensuring mask and visor has not touched anything.</li></ol> <p>Complete a hand wash with soap and water before leaving the immediate treatment area and before undertaking any other task.</p>	
---	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

### Gloving another Person

If the gown has been contaminated, then the scrub person [**Contaminated (1)**] must leave the sterile field and re-scrub.

Occasionally it may be necessary for the scrub person [**Not Contaminated (2)**] to assist another member of the scrub team to don or change their gloves, if they have become contaminated. Their gloves should be removed as described in the procedure below.

Procedure for re-gloving another practitioner. Method 1		
No.	Action	Picture Guide
1	The scrub person <b>(1)</b> with contaminated glove/gloves extends arms as far away as possible from the sterile field.	
2	The circulating person wearing non-sterile gloves grasps the contaminated glove at wrist level and pulls the glove over the hand to remove.	
3	The scrub person <b>(1)</b> leaves hand exposed and away from sterile fields.	
4	The circulator opens appropriate size gloves for the scrub person.	
5	The scrub person <b>(2)</b> grasps the new glove firmly holding it out at waist level. The glove is held by the cuff and stretched outwards so that the other person <b>(1)</b> can introduce their hand without touching the other scrub person <b>(2)</b> gloves. The scrub person <b>(2)</b> protects own gloved fingers by holding them beneath the cuff of the glove, and their thumbs by holding them away from the partly-gloved hand. Repeat technique for other hand if required.	 

### Procedure for re-gloving self. Method 2


No.	Action	Picture Guide
1	The scrubbed person <b>(1)</b> with contaminated glove/gloves extends arms as far away as possible from the sterile field	
2	The circulator wearing gloves grasps the contaminated glove and cuff of gown and pulls the glove over the hand ensuring that the sterile gown moves downwards to cover the fingertips.	
3	The circulator opens appropriate size gloves for the scrub person <b>(1)</b>	
4	The scrub person <b>(1)</b> re-dons sterile gloves as per closed method 1 or 2 in Appendix 3.	



Members of the sterile surgical team should double glove (surgical underglove) for added protection as per appropriate risk assessment and consequently to reduce the risk of exposure to patient blood and body fluids and cross contamination.

It is best practise to double glove for cases where there is a higher risk of sharp bodies penetrating the glove.

For cases of 2 hours or more and for deep cavity surgery it is advisable to double glove but this has to be assessed by each practitioner/surgeon depending on the amount of dexterity and sensation required for the procedure.

Procedure for Double-Gloving		
No.	Action	Picture Guide
1	The scrubbed person must wear a different coloured glove as the innermost glove to ensure that micro-punctures and contaminations are easily identified.	
2	Don innermost gloves as per Appendix 3 (Method 1 or Method 2).	
3	Don the outer gloves	
4	Ensure that gloves fit snugly and does not cause any restrictions to movement and dexterity.	
5	Ensure that the outer gloves are pulled well over the inner gloves to avoid roll or slip down.	

**Miscellaneous.**  
**Procedure for Scrubbing Using an Alcohol-based hand rub formulation**

**Appendix 7**

**Scrubbing technique with an alcohol-based hand rub formulation (WHO, 2008)**

The handrubbing technique for surgical hand preparation must be performed on perfectly clean, dry hands. On arrival in the operating theatre and after having donned theatre clothing (cap/hat/bonnet and mask), hands must be washed with soap and water. After the operation when removing gloves, hands must be rubbed with an alcohol-based formulation or washed with soap and water if any residual talc or biological fluids are present (e.g. the glove is punctured).

Surgical procedures may be carried out one after the other without the need for handwashing, provided that the handrubbing technique for surgical hand preparation is followed (Images 1 to 17).



**1**  
Put approximately 5ml (3 doses) of alcohol-based handrub in the palm of your left hand, using the elbow of your other arm to operate the dispenser



**2**  
Dip the fingertips of your right hand in the handrub to decontaminate under the nails (5 seconds)



**3**  
Images 3–7: Smear the handrub 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 handrub has fully evaporated (10-15 seconds)



**4**  
See legend for Image 3



**5**  
See legend for Image 3



**6**  
See legend for Image 3



**7**  
See legend for Image 3



**8**  
Put approximately 5ml (3 doses) of alcohol-based handrub in the palm of your right hand, using the elbow of your other arm to operate the dispenser



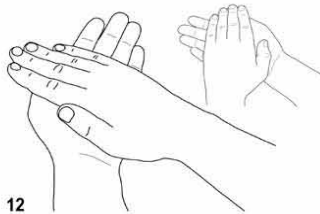
**9**  
Dip the fingertips of your left hand in the handrub to decontaminate under the nails (5 seconds)



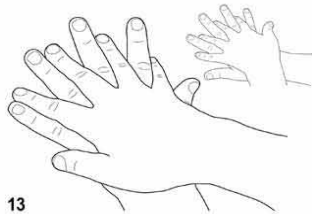
**10**  
Smear the handrub on the left forearm up to the elbow. Ensure that the whole skin area is covered by using circular movements around the forearm until the handrub has fully evaporated (10-15 seconds)



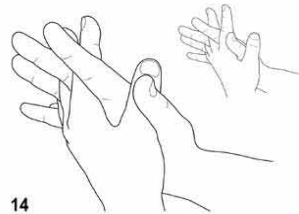
**11**  
Put approximately 5ml (3 doses) of alcohol-based handrub in the palm of your left hand, using the elbow of your other arm to operate the distributor. Rub both hands at the same time up to the wrists, and ensure that all the steps represented in Images 12-17 are followed (20-30 seconds)



**12**  
Cover the whole surface of the hands up to the wrist with alcohol-based handrub, rubbing palm against palm with a rotating movement



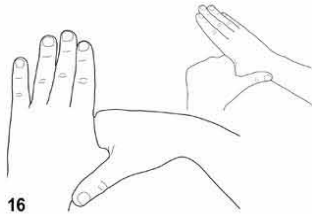
**13**  
Rub the back of the left hand, including the wrist, moving the right palm back and forth, and vice-versa



**14**  
Rub palm against palm back and forth with fingers interlinked



**15**  
Rub the back of the fingers by holding them in the palm of the other hand with a sideways back and forth movement



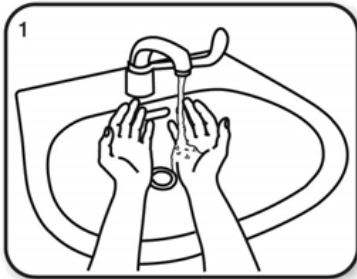
**16**  
Rub the thumb of the left hand by rotating it in the clasped palm of the right hand and vice versa



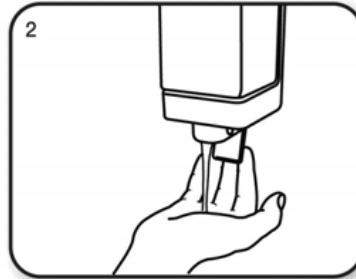
**17**  
When the hands are dry, sterile surgical clothing and gloves can be donned

Repeat the above-illustrated sequence (average duration, 60 sec) according to the number of times corresponding to the total duration recommended by the manufacturer for surgical hand preparation with an alcohol-based handrub.

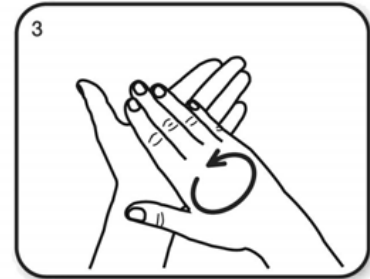
Source: World Health Organisation



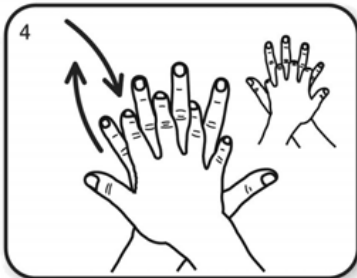
Wet hands with water



Apply enough soap to cover all hand surfaces



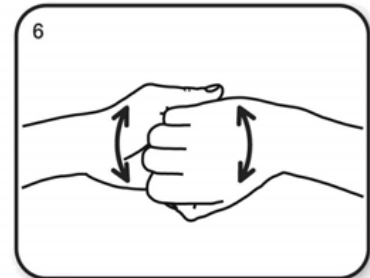
Rub hands palm to palm



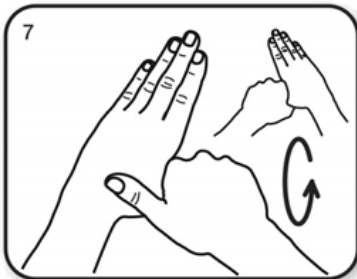
Right palm over the back of the other hand with interlaced fingers and vice versa



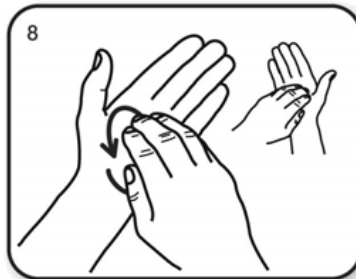
Palm to palm with fingers interlaced



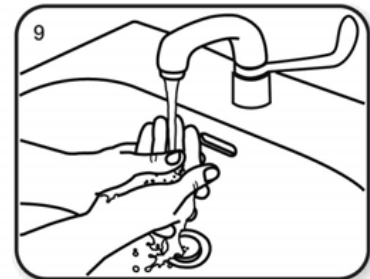
Backs of fingers to opposing palms with fingers interlocked



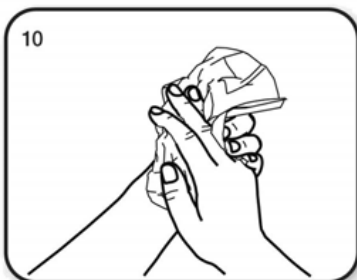
Rotational rubbing of left thumb clasped in right palm and vice versa



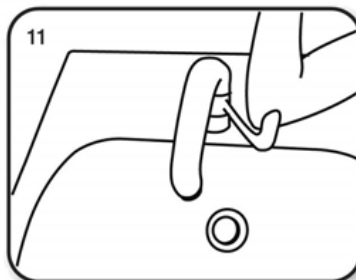
Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa



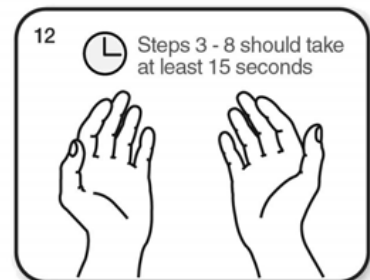
Rinse hands with water



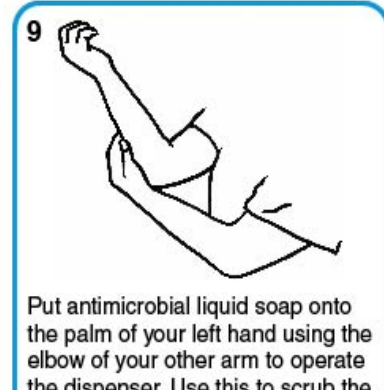
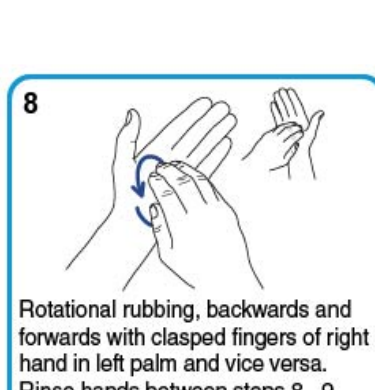
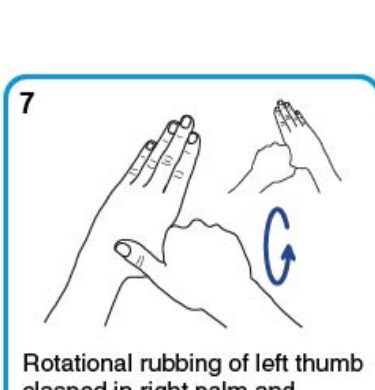
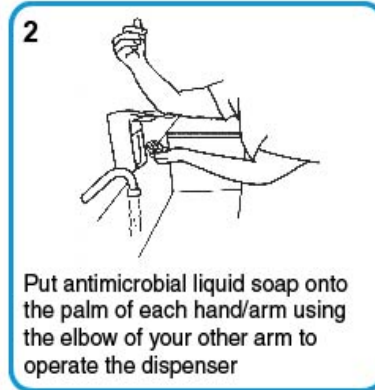
Dry thoroughly with towel



Use elbow to turn off tap



...and your hands are safe



10

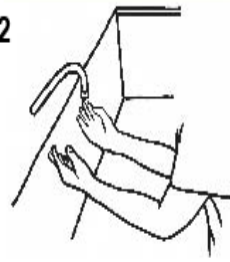
Repeat the process for the other hand and arm keeping hands above elbows at all times.

If the hand touches anything at any time, the scrub must be lengthened by 1 minute for the area that has been contaminated.

11

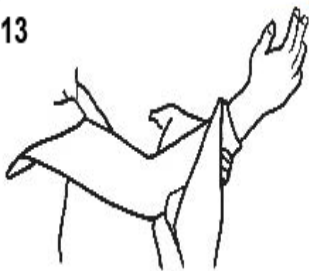
Repeat steps 1 to 10 to the mid forearms only.

12



Rinse hands and arms by passing them through the water in one direction only, from fingertips to elbow. Do not move the arm back and forth through the water.

13



Hold hands above the elbow. Use one sterile, disposable towel per hand and arm. Blot the skin of the hand, then use a corkscrew movement to dry from the hand to the elbow.

The towel must not be returned to the hand once the arm has been dried and must be discarded immediately.

\* Nails should be cleaned using a soft, single-use disposable nail brush or nail pick before the first scrub of the day or if visibly dirty. Any skin complaints should be referred to local occupational health or GP

Acknowledgement: With thanks to staff at the Golden Jubilee Foundation for their assistance producing this appendix.

8 April 2022