SOP Objective

To ensure that Healthcare Workers (HCWs) understand the importance of and their responsibilities in complying with this Hand Hygiene SOP.

To provide HCWs with an environment which supports and facilitates effective hand hygiene.

This SOP applies to all staff employed by NHS Greater Glasgow & Clyde and locum staff on fixed term contracts.

KEY CHANGES FROM THE PREVIOUS VERSION OF THIS SOP

- Changes to ensure alignment with the National Infection Prevention and Control Manual

Document Control Summary

<table>
<thead>
<tr>
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<tbody>
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</tbody>
</table>
CONTENTS
1. Responsibilities ........................................................................................................................... 3
2. Structure ..................................................................................................................................... 5
2.1 Clinical settings ......................................................................................................................... 5
2.2 Home Care Settings.................................................................................................................. 6
3. Performing Hand Hygiene........................................................................................................... 6
3.1 Before performing hand hygiene ........................................................................................... 6
3.2 5 Moments for Hand Hygiene ................................................................................................... 7
3.3 Hand Hygiene: Wash with Soap and water.............................................................................7
3.4 Hand Rub using ABHR..............................................................................................................8
4. Performing Surgical Scrubbing/Rubbing....................................................................................9
4.1 Performing Surgical Scrub.........................................................................................................9
4.2 Performing Surgical Rub.........................................................................................................11
5. Skin Care..................................................................................................................................12
6. Evidence Base..........................................................................................................................13
7. Audit........................................................................................................................................14
8. Website Links..........................................................................................................................15
9. Appendix 1: How to Hand Wash..............................................................................................16
10. Appendix 2: How to Hand Rub.................................................................................................17

The most up-to-date version of this SOP can be viewed at the following website:
www.nhsggc.org.uk/your-health/infection-prevention-and-control/
1. Responsibilities

**Healthcare Workers (HCWs) must:**

- Follow this SOP AND inform a member of the Infection Prevention and Control Team (IPCT) if this SOP cannot be followed.
- Report to clinical manager or Infection Prevention and Control Nurse (IPCN) if the area does not have any of the structural requirements, e.g. Clinical Wash Hand Basins (CWHBs), Alcohol Based Hand Rub (ABHR) etc, to follow this SOP.
- Report to Occupational Health (OH) if they develop sensitivities, or are otherwise unable to use the product supplied.
- Ensure there is always a sufficient supply of hand hygiene sundries within expiry date.
- Remind colleagues of the importance of hand hygiene in the clinical setting when observed hand hygiene opportunities are missed.
- Promote hand hygiene by patients and visitors.
- Risk assessment should be undertaken by the clinical team if there is any risk that patients might ingest ABHR or any products.

**Managers must:**

- Ensure that their area is compliant with SGHD CEL 5(2009) Zero tolerance to non-hand hygiene compliance.
- Ensure that staff are aware of the contents of this SOP.
- Support HCWs and IPCTs in following this SOP.
- Remind colleagues of the importance of hand hygiene in the clinical setting when observed hand hygiene opportunities are missed.
- Encourage staff to take up education programmes on hand hygiene via IPCT or online at Learnpro / NES.
• Ensure all HCWs have access to this SOP.
• Promote hand hygiene by all HCWs, patients and visitors.
• Ensure HCWs have access to appropriate hand hygiene sundries.
• Liaise with the appropriate department if structural issues are identified.

IPCTs must:
• Keep this SOP up-to-date.
• Audit compliance with this SOP via the Local Health Board Co-ordinator for Hand Hygiene (LHBC).
• Provide education opportunities on this SOP.
• Remind colleagues of the importance of hand hygiene in the clinical setting when observed hand hygiene opportunities are missed.
• Assist others to audit the implementation of and compliance with this SOP.
• Liaise with procurement and occupational health staff regarding the choice of products for hand hygiene.
• Liaise with the appropriate department if structural issues are identified.

Pharmacy and Procurement must:
• Liaise with the IPCT when choosing hand hygiene products or if problems with product use or supply develop.

Occupational Health must:
• Provide advice to healthcare staff who are experiencing skin problems liked to hand hygiene
• Undertake skin health surveillance
• Contact IPCTs if issues arise with use.

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2. Structure

2.1 Clinical settings

- In clinical settings there must be sufficient accessible CWHBs of a size to enable effective hand washing to take place. Sufficient is defined via the NHS building notes or to the satisfaction of the IPCT.
- CWHBs should have elbow, wrist, foot, or automatic mixer taps which have a combined pillar and no plug or overflow. Water should not be discharged directly into an outlet.
- Paper towels must be available and wall mounted in a dispenser.
- Plain foaming/liquid soap must be available and wall mounted in a dispenser. Dispensers and plungers must be used until the dispenser is empty and then discarded as household waste. **The dispenser must not be topped up and re-used.**
- **NB bar soap must not be supplied for clinical use**
- Liquid antimicrobial soap should be available where a surgical scrub is anticipated.

**Hand washing facilities should:**

- Only be used for the purpose of hand washing
- NOT be used for disposal of any body fluids or waste water
- ABHR must be within expiry date and available in a wall mounted or free standing dispenser.
- Hands free, foot operated bins should be available for waste disposal.
- Educational material illustrating the correct method of hand hygiene should be displayed at every CWHB.
- **Dispenser nozzles must be clean and free from congealed product residue, with cleaning schedules reflecting this.**
Where ABHR is present at ward or department entrances then Hand Hygiene technique posters must be displayed. When admitting visitors to the area they should be instructed on how to use the ABHR.

2.2 Home Care Settings

HCWs working in a home care setting should undertake a risk assessment of the hand washing facilities available to perform hand hygiene, in each home. The following options are suggested:

- Where running water and foaming/liquid soap are available and access to the sink is clear, the HCW can carry paper hand towels to use in the client’s home.
- When foaming/liquid soap is not available, the HCW can carry their own supply of liquid soap/ hand towels/ ABHR as recommended by the employer/ IPCT. A community pack is available to order for this purpose.
- If access is difficult or limited and hands are physically clean ABHR can be used.
- Hand wipes should not be used by staff in the hospital or care home setting for hand hygiene unless there is no running water available in which case staff may use hand wipes followed by ABHR and should wash their hands at the first available opportunity.

3. Undertaking Hand Hygiene – Rationale and Technique

Hands acquire micro-organisms from other sites on an individual’s body, from other people and from the environment. The ease with which these organisms can be passed to and from the hands makes them extremely efficient vectors for infection.

3.1 Before performing hand hygiene

- Bare below the elbows - expose forearms - remove outerwear, roll up sleeves;
• remove all hand/ wrist jewellery, including wristwatches and wearable fitness devices e.g. Fitbit, Garmin, etc. (a single, plain metal finger ring is permitted but should be removed (or moved up) during hand hygiene);
• Ensure fingernails are clean, short and that artificial nails or nail products are not worn e.g. polish, gel or shellac;
• Cover all cuts or abrasions with a waterproof dressing.

3.2 5 Moments for Hand Hygiene
Hand hygiene should be performed:
• before touching a patient
• before clean/ aseptic procedures;
• after body fluid exposure risk;
• after touching a patient;
• after touching a patient’s immediate surroundings.

3.3 Hand Hygiene: Wash with Soap and Water (Appendix 1)
Wash hands with plain foaming/ liquid soap and water if:
• hands are visibly soiled or dirty;
• caring for patients with vomiting or diarrhoeal illnesses; or
• caring for a patient with a suspected or known gastro-intestinal infection e.g. norovirus or a spore forming organism such as Clostridium difficile.

Hands should be washed as follows:
• Wet hands under running warm/ tepid water.
• Apply the manufacturers recommended quantity of plain foaming/liquid soap – normally via a measured dispenser.
The most up-to-date version of this SOP can be viewed at the following website:
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<th>Hand Hygiene</th>
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<td>3.4 Hand rub using ABHR (Appendix 2)</td>
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<td>ABHR must be available to staff as near to the point of care as possible.</td>
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<td><strong>NB. ABHR is not sufficient if hands are visibly dirty or soiled and/or if exposed to loose stools, therefore hands must be washed with plain foaming/liquid soap and water.</strong></td>
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<td>- Apply ABHR to the cupped palm of one hand. Follow the manufacturers’ instructions for the volume that will provide adequate coverage of the hands; this is normally around 3 ml.</td>
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<td>- Rub the hands together utilising the 6 Step technique to ensure that the ABHR covers all surfaces of the hands.</td>
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<td>- Hand rubbing should be performed for 15-30 seconds until the hands are dry.</td>
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<td>- If HCWs have used ABHR when leaving a patient and are going directly to the next patient, e.g. during ward rounds or active care activities, then they are not required to use ABHR on their hands twice.</td>
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4. Performing Surgical Scrubbing/ Rubbing

A surgical hand antisepsis policy that includes the removal of all finger rings provides the surgical scrub team with a highly visible way to:

- Demonstrate their commitment to good infection prevention and control practice.
- Highlight their determination to reduce Surgical Site Infection (SSI)/Healthcare Associated Infection (HAI), thus contributing to improved patient safety.
- Effectively comply with good surgical scrub/hand rub technique/preparation.
- Surgical scrubbing/ rubbing must be undertaken before donning sterile theatre garments.
- All hand/ wrist jewellery must be removed.
- Brushes should not be used. Nail picks can be used if nails are visibly dirty.
- Sterile (single-use) sponges may be used if appropriate.
- An antimicrobial foaming/liquid soap licensed for surgical scrubbing or an ABHR licensed for surgical rubbing (as specified on the product label) must be used.
- ABHR can be used on visibly clean hands between surgical procedures, if licensed for this use.
- Once surgical procedures are finished, general hand hygiene (i.e. plain foaming/liquid soap and water or ABHR (if hands are not visibly soiled)) should be performed after surgical gloves are removed and before any other activities are undertaken.

4.1 Performing Surgical Scrub

The following technique should be used to ensure that all surfaces of the hands are covered during surgical scrubbing however manufacturer’s guidance on products used should also be taken into consideration:

- Wash hands with plain foaming/liquid soap and running water using the normal steps for handwashing (if hands are visibly soiled) immediately prior to surgical scrubbing.
• Start timing. Wet hands and forearms. Scrub each side of each finger, between the fingers, and the back and front of right hand for 2 min (using an antimicrobial foaming/liquid soap).

• Scrub the right arm, keeping the hand higher than the arm at all times to prevent recontamination of the hands by water from the elbows and bacteria-laden soap and water from contaminating the hands.

• Wash each side of the right arm from the wrist to the elbow for 1 min.

• Repeat the process on 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 min for the area that has been contaminated).

• 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.

• Hold hands above elbows.

• Hands and arms should be dried using a sterile towel and aseptic technique

  Do not splash water onto surgical attire.

  Do not shake hands to disperse water from them.

• The skin should be blotted dry with sterile towels (rubbing will disturb skin cells).

• Using one towel per hand work from fingertips to elbows.

• Hands are dried firstly by placing the opposite hand behind the towel and blotting the skin – then using 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.

• The process is then repeated for the opposite hand.
4.2 Surgical Rub

The following technique should be used to ensure that all surfaces of their hands are covered during surgical rubbing:

- **Always follow the manufacturer’s application volumes/times to ensure the effectiveness of the product used.**
- Hands should be washed with plain foaming/liquid soap and dried thoroughly using the normal steps for handwashing.
- 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 ABHR to decontaminate under the nails (5 seconds).
- Smear the ABHR 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).
- Hands and forearms should remain wet (i.e. the ABHR should not be allowed to fully evaporate until the surgical hand rubbing process is complete) throughout the surgical hand rub.
- Put approximately 5ml (3 doses) of ABHR in the palm of your right hand, using the elbow of your other arm to operate the dispenser.
- Dip the fingertips of your left hand in the ABHR to decontaminate under the nails (5 seconds).
- Smear the ABHR 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 hand rub has fully evaporated (10-15 seconds).
• Put approximately 5ml (3 doses) of ABHR 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 surfaces of the hands are covered using the standard ABHR procedure for hand hygiene.

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

5. Skin Care

• NHSGGC provide only hand hygiene products that minimise the risk of hand irritation and contain emollients. All products for hand hygiene will be approved by the IPCT.

• Apply emollient hand cream as required to protect skin from the drying effects of regular hand hygiene. Hand cream supplied by NHSGGC should be contained in a wall mounted pump dispenser or free standing container and marked with an expiry date as marked by clinical staff; 12 months from opening. Cream should be applied at start/end of working day and at main break time. If skin is at risk of further damage then more frequent use of the emollient is allowed throughout a working shift.

• Provide HCWs with hand creams which are sanctioned by the Procurement Department which do not negate the properties of active compounds in other hand hygiene products, or the integrity of gloves.

• Do not use communal tubs of hand cream as they can become contaminated during use.

• If exfoliative skin conditions develop contact the Occupational Health Service promptly.

• If staff have sensitivities, the Occupational Health Service will liaise with the IPCTs when comparable alternatives are supplied for named personnel only.
• **6. Evidence Base**


The Epic Project Team. The guidelines for hand hygiene. 2014


The Health & Safety at Work Act 1974.

Control of Substances Hazardous to Health (COSHH) 2002.


National Infection Prevention and Control Manual
7. Audit

NHS Boards in Scotland are required to monitor compliance with hand hygiene in two distinct ways. Each clinical area is required by CEL 5(2009) to audit compliance with hand hygiene in their area each month. The results of this audit which is based on the Scottish Patient Safety Programme (SPSP) methodology is collated locally, e.g. LanQIP and is used to report on the Boards performance in relation to hand hygiene via the HAIRT (Healthcare Associated Infection Reporting Template) which is a paper prepared every two months and made available for patients and public to view. The second way is via the audits which are conducted by the LHBC. This is part of a Quality Assurance process in place for NHSGGC to continue the improvement seen in Hand Hygiene compliance.
The most up-to-date version of this SOP can be viewed at the following website:
www.nhsggc.org.uk/your-health/infection-prevention-and-control/

8. Website Links

- www.nhsggc.org.uk/your-health/infection-prevention-and-control/
- www.washyourhandsofthem.com
- http://whqlibdoc.who.int/publications/2009/9789241597906_eng.pdf?ua=1
- http://www.nipcm.hps.scot.nhs.uk/chapter-1-standard-infection-control-precautions-sicps/#a1069
Appendix 1 - How to hand wash step by step images

Steps 3-8 should take at least 15 seconds.

1. Wet hands with water.
2. Apply enough soap to cover all hand surfaces.
3. Rub hands palm to palm.
4. Right palm over the back of the other hand with interlaced fingers and vise versa.
5. Palm to palm with fingers interlaced.
6. Backs of fingers to opposing palms with fingers interlaced.
7. Rotational rubbing of left thumb cleaved to right palm and vise versa.
8. Rotational rubbing, backwards and forwards with clasped fingers of right hand to left palm and vise versa.
9. Rinse hands with water.
10. Dry thoroughly with towel.
11. Use elbow to turn off tap.

*Any skin complaints should be referred to local occupational health or GP.*

Germ's. Wash your hands of them.
Appendix 2 - How to handrub step by step images

Duration of the process: 20-30 seconds.

1. Apply a palmful of the product in a cupped hand and cover all surfaces.
2. Rub hands palm to palm.
3. Right palm over the back of the other hand with interlaced fingers and vice versa.
4. Palm to palm with fingers interlaced.
5. Backs of fingers to opposing palms with fingers interlocked.
6. Rotational rubbing of left thumb clasped in right palm and vice versa.
7. Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa.
8. Once dry, your hands are safe.