Guidance Objective

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

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

This guidance 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 GUIDANCE

Important Note: The version of this policy found on the Infection Prevention & Control (eIPC Manual) on the intranet page is the only version that is controlled. Any other versions either printed or embedded into other documents or web pages should be viewed as uncontrolled and as such may not necessarily contain the latest updates, amendments, or linkages to other documents.

Document Control Summary

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Related Documents	The National Infection Prevention and Control Manual
Distribution/Availability	NHSGGC Infection Prevention and Control web page www.nhsggc.scot/hospitals-services/services-a-to-z/infection-prevention-and-control
Lead	Local Health Board Co-ordinator for the National Hand Hygiene Campaign
Responsible Director	Executive Director of Nursing

CONTENTS

1. Responsibilities

Healthcare Workers (HCWs) must:

- Follow this guidance AND inform a member of the Infection Prevention and Control Team (IPCT) if this guidance 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 guidance.
- Report to Occupational Health (OH) if they develop sensitivities, or are otherwise unable to use the products 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 guidance.
- Support HCWs and IPCTs in following this guidance.
- 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 guidance.
- 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.

Infection Prevention and Control Teams (IPCTs) must:

- Keep this guidance up-to-date.
- Audit compliance with this guidance via the Local Health Board Co-ordinator for Hand Hygiene (LHBC).
- Provide education opportunities on this guidance.
- 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 guidance.
- 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 Service (OHS) must:

- Provide advice to healthcare staff that are experiencing skin problems linked to hand hygiene.
- Undertake skin health surveillance.
- Contact IPCTs if issues arise with use.

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.
- 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.

  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 must be available for waste disposal.
- 6 steps poster should be available at every CWHB.
- 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.
- 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.
- If there is no running water available staff may use hand wipes followed by ABHR.

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 /activity trackers. A single, plain metal finger ring is permitted but should be removed or moved during hand hygiene. They can inhibit effective hand decontamination and may increase bacterial load on the hands.
- Bracelets or bangles which are worn for religious reasons should be able to be pushed higher up the arm to enable effective hand hygiene
- Ensure fingernails are clean, short and that artificial nails or nail products are not worn e.g. polish, gel.
- Cover all cuts or abrasions with a waterproof dressing.

3.2 5 Moments for Hand Hygiene

Hand hygiene should be performed:

1. before touching a patient
2. before clean/ aseptic procedures;
3. after body fluid exposure risk;
4. after touching a patient;
5. 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 Clostridioides difficile.

In all other circumstances use ABHR for routine hand hygiene during care

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.
- Rub hands together for 15-30 seconds, following the 6 Step technique, ensuring all surfaces of the hands are covered with lather.
- Rinse hands well under running water.
- Dry hands thoroughly using soft, absorbent, disposable paper towels. This should be achieved by patting hands to minimise skin irritation.

- Turn off the tap(s) using elbow/wrist or a paper towel to prevent contamination of clean hands.
- Air-dryers, including high speed air-dryers, should not be used in the clinical setting because they may disperse microorganisms into the environment.

3.4 Hand rub using ABHR (Appendix 2)

ABHR solutions containing 62-90**%** alcohol by volume are the preferred product for hand hygiene in health and care settings.

ABHR must be available to staff as near to the point of care as possible and can be utilised for hand hygiene throughout the working day if appropriate. In areas where ABHR cannot be placed for reasons of patient safety an up-to-date risk assessment must be available

NB. ABHR is not appropriate if hands are visibly dirty or soiled and/ or if exposed to loose stools or spore forming organisms e.g. C. difficile, therefore hands must be washed with plain foaming/ liquid soap and water.

- Apply ABHR to the cupped palm of one hand. Follow the manufacturers' instructions for the volume that will provide adequate coverage of the hands.
- Rub the hands together utilising the 6 Step technique to ensure that the ABHR covers all surfaces of the hands.
- **Hand rubbing should be performed typically for 20-30 seconds until the hands are dry.**
- Avoid touching any surfaces/equipment until hands are dry
- 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.

The use of ABHR by persons with religious beliefs that forbid the consumption of alcohol is permissible as external application of the synthetic alcohol in these solutions is not considered intoxicating.

4. Performing Surgical Scrubbing/ Rubbing

Surgical hand antisepsis is more thorough than routine hand hygiene; in addition to the removal of visible soiling and transient bacteria, it prevents the growth of resident microbial skin flora before performing an invasive procedure.

- Surgical hand antisepsis should take place before donning sterile PPE (for instance gloves and gowns).
- All hand/ wrist jewellery must be removed.
- Surgical scrubbing using an antimicrobial surgical scrub product should be used for the first surgical hand antisepsis of the day. Or perform hand hygiene using water a non-antimicrobial liquid soap prior to the first surgical antisepsis of the day; this can be carried out in an adjacent clinical area.
- Surgical hand antisepsis should be performed between each procedure; using either the surgical scrubbing technique or surgical rubbing (if hands are not visibly soiled).
- Surgical rubbing with ABHR is a suitable alternative to surgical scrubbing with an antimicrobial scrub agent.
- Alcohol based hand rub (ABHR) may also be used for hand decontamination between glove changes if hands are not visibly soiled.
- Surgical hand antisepsis products intended for use in health and care settings should meet the minimum and additional BS EN standards.
- Nail brushes should not be used for surgical hand antisepsis.
- Nail picks (single-use) can be used if nails are visibly dirty.
- Soft, non-abrasive, sterile (single-use) sponges may be used to apply antimicrobial liquid soap to the skin if licensed for this purpose.
- 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.
- Surgical scrubbing should be performed with an agent that has immediate and sustained antimicrobial effect (e.g. chlorhexidine gluconate, povidone-iodine).

- 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

Surgical scrubbing using an antimicrobial surgical scrub product should be used for the first surgical hand antisepsis of the day. The following technique should be used to ensure that all surfaces of the hands and forearms, to elbows, are covered during surgical hand antisepsis (manufacturers guidance on products used should also be taken into consideration):

• Wet hands and forearms and, according to the manufacturer's instructions regarding amount, apply the solution from a dispenser. Rub solution into the hands palm to palm and then work upwards until all areas to just below the elbow are covered in solution.

• Using the right palm spread product over the back of the left hand with interlaced fingers. Repeat with the left palm on the back of the right hand.

• With fingers interlaced, rub palm to palm.

• Clasp the fingers of the right hand into the left palm and rotate hands. Repeat with the opposite hand.

• Hold the right thumb in the left hand and rotate to cover in scrub solution. Repeat with the opposing thumb.

• For both hands, rub the fingertips on the palm.

• Working only in the direction towards the elbows, use a rotating action to move one hand around the arm to just below the elbow. Repeat on the other arm.

• Rinse. Repeat above steps. Ensure hands are kept higher than elbows throughout the process.

• Allow water to run off skin. Take a sterile single-use towel and pat dry left hand down to the elbow, discard the towel and repeat with the right hand.

- The skin should be blotted dry with sterile single-use towels (rubbing will disturb skin cells).
- Using one towel per hand and arm work from fingertips to elbows by placing the opposite hand behind the towel and blotting the skin using a corkscrew movement to dry from the hand to the elbow.

- Using a second towel repeat the process on the other hand and arm to the elbow.
- The towel must not be returned to the hand once the arm has been dried and must be disposed of immediately.

The process described above will take a minimum of 4 min to complete, however, manufacturer's guidance for the minimum specific time that is deemed effective for their product should be adhered to and the process lengthened if required.

4.2 Surgical Rub

Surgical rubbing with an ABHR licenced for that purpose is an appropriate alternative to surgical scrubbing with an antimicrobial soap. Surgical rubbing is superior to, or as effective as, a traditional surgical scrub.

The following technique should be used to ensure that all surfaces of hands and forearms, to elbows, are covered during surgical rubbing:

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).

• 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).

• Repeat above steps for the left hand and forearm.

• Put approximately 5ml (3 doses) of ABHR in the palm of your left hand, to rub both hands at the same time up to the wrists (20 – 30 seconds). Using a rotating movement, and rubbing palm against palm, ensure the whole surface of the hands are covered up to the wrist.

• With fingers interlaced, rub palms back and forth.

• Moving the right palm back and forth, rub the back of the left hand and wrist and repeat with opposite hand.

• Hold the back of the fingers in the palm of the other hand and rub them using a sideways back and forth movement.

• Clasp each thumb in the opposite hand and rotate.

• When hands are dry, sterile surgical clothing and gloves can be donned. ABHR should not be applied on wet skin and hands should be fully dry before donning sterile gloves.

• The above sequence (average 60 seconds) should be undertaken until the ABHR manufacturer's instructions for duration is reached. Manufacturer's guidance should be followed to ensure effectiveness of the product used. Surgical scrubbing should not be combined with surgical hand rubbing in sequence.

5. Skin Care

- Hands should not be washed immediately after using ABHR as this may remove any emollients that were present in the hand rub and the superficial skin sebum.
- Warm/tepid water should be used to reduce the risk of dermatitis.
- Pat hands dry thoroughly after hand washing using disposable paper towels; avoid rubbing which may lead to skin irritation/damage.
- NHSGGC provide only hand hygiene products that minimise the risk of hand irritation and contain emollients.
- 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 or free standing pump dispenser and marked with an expiry date 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.
- HCWs are provided with hand creams which are sanctioned by the Procurement Department which do not affect the efficacy of the hand hygiene products or gloves used (oil-based products are known to have a potentially damaging effect on gloves).
- Do not use communal tubs of hand cream as they can become contaminated during use.
- Hand cream dispensers should not be refilled or topped up.
- 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

Guideline for hand hygiene in Health Care Settings. Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/ SHEA/ APIC/ IDSA Hand Hygiene Task Force. MMWR October 2002 51. No RR-16.

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

Infection Control Nurses Association. Guidelines for Hand hygiene. 1999.

Infection Control in the Community. (2003) Lawrence J &May D. Churchill Livingstone.

WHO Guidelines on Hand Hygiene in Health Care (2009).

The Health & Safety at Work Act 1974.

Control of Substances Hazardous to Health (COSHH) 2002.

SGHD CEL 5 (2009) Zero Tolerance to Non Hand Hygiene Compliance. SGHD 2009.

National Infection Prevention and Control Manual

7. Audit

NHS Boards in Scotland are required to monitor compliance with hand hygiene in two distinct ways. In addition to the Quality Assurance audits undertaken by the LHBC, each clinical area is required to audit compliance with hand hygiene in each month. The results of this audit which is based on the Scottish Patient Safety Programme (SPSP) methodology is collated locally, e.g. CAIR and is used to report monthly on the Boards performance via the HAIRT (Healthcare Associated Infection Reporting Template).

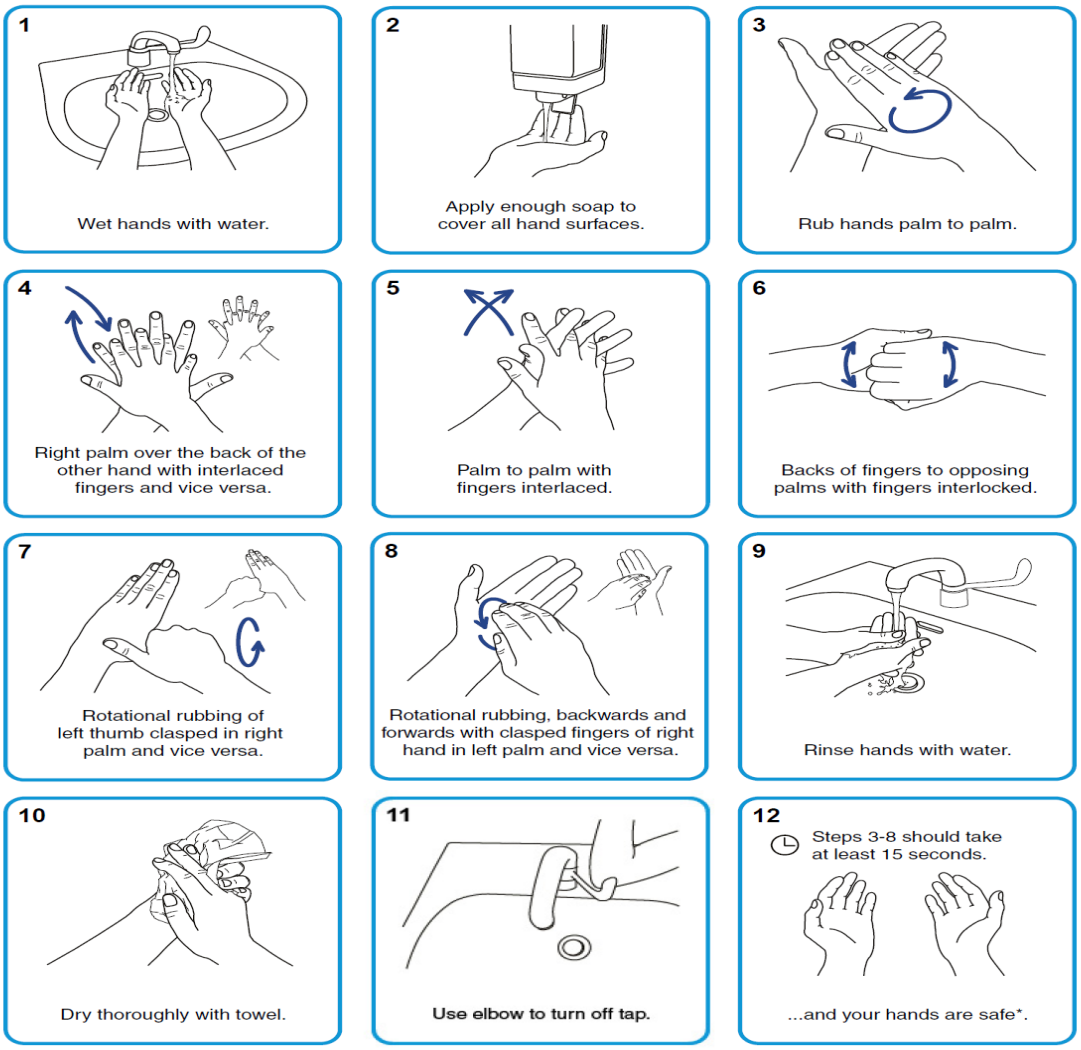
8. Website Links

- www.nhsggc.scot/hospitals-services/services-a-to-z/infection-prevention-and-control
- www.washyourhandsofthem.com
- National Infection Prevention and Control Manual: Chapter 1 - Standard Infection Control Precautions (SICPs)

Best Practice:

Best Practice: Appendix 1 - How to hand wash step by step images

Steps 3-8 should take at least 15 seconds.



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

Adapted from the World Health Organization

Germs. Wash your hands of them.

NHS SCOTLAND

Part of the National Infection Prevention and Control Manual (NIPCM), available at: http://www.nipcm.hps.scot.nhs.uk/.
Produced by: Health Protection Scotland, July 2018.

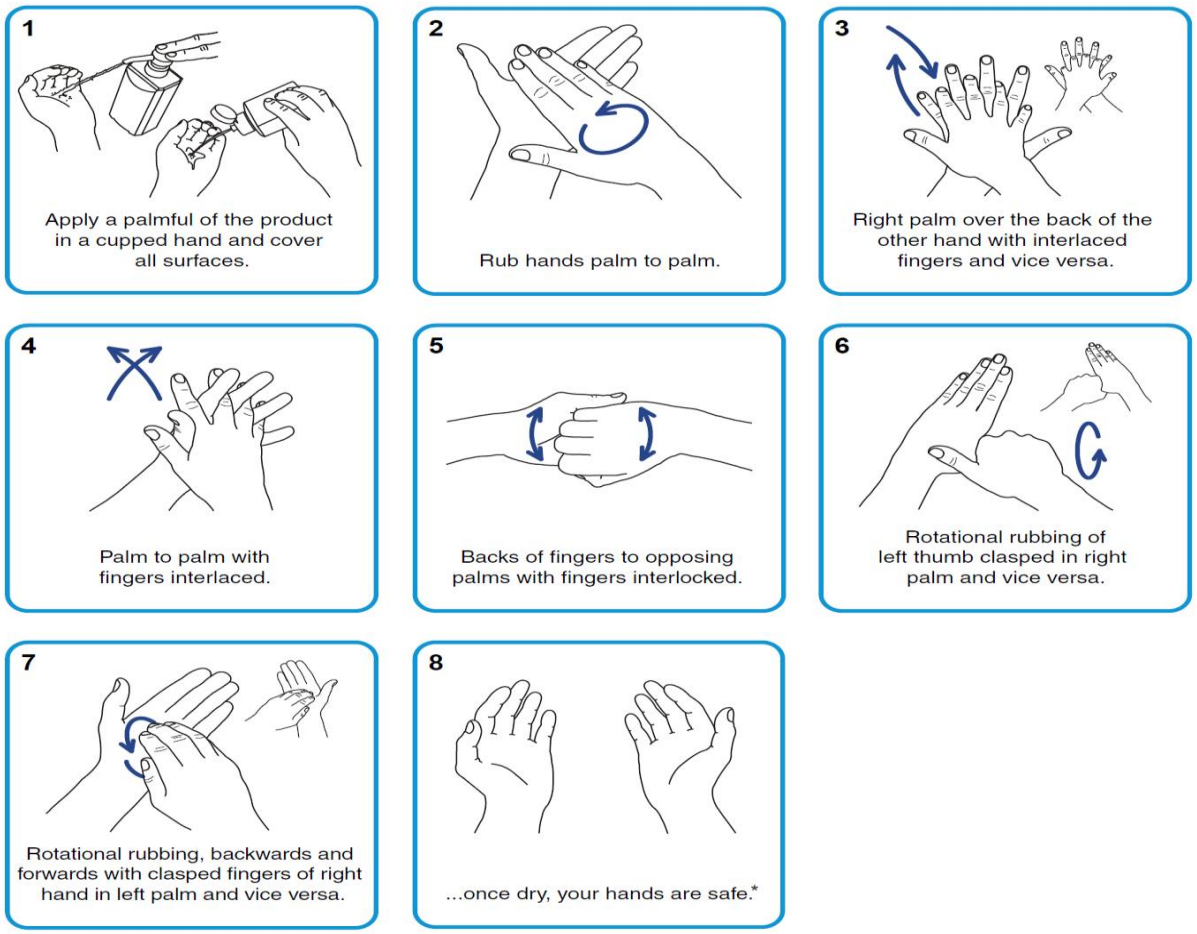
***Available via the NIPCM**

Appendix 2

NHS SCOTLAND

Appendix 2: How to handrub step by step images

Duration of the process: 20-30 seconds.



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