

**Ref: IPC 10**

## **Hand Hygiene Policy**

<b>Executive Sponsor &amp; Function</b>	Executive Director of Nursing, Allied Health Professionals & Healthcare Scientists
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## CONTENTS

<b>ABBREVIATIONS .....</b>	<b>3</b>
<b>1 POLICY STATEMENT .....</b>	<b>4</b>
<b>2 SCOPE OF POLICY .....</b>	<b>4</b>
<b>3 AIMS AND OBJECTIVES .....</b>	<b>4</b>
<b>4 RESPONSIBILITIES .....</b>	<b>4</b>
<b>4.1 THE CHIEF EXECUTIVE.....</b>	<b>4</b>
<b>4.2 DIRECTOR OF NURSING, AHP'S &amp; HEALTHCARE SCIENTISTS .....</b>	<b>4</b>
<b>4.3 DEPARTMENTAL MANAGERS/ CLINICAL DIRECTORS / CLINICAL MANAGERS ....</b>	<b>5</b>
<b>4.4 ALL STAFF – (PROVIDING DIRECT CARE IN A HEALTH CARE SETTING) MUST: ..</b>	<b>5</b>
<b>4.5 INFECTION PREVENTION AND CONTROL TEAM (IPCT) WILL: .....</b>	<b>6</b>
<b>4.6 PATIENT, DONOR AND VISITOR, INVOLVEMENT .....</b>	<b>7</b>
<b>4.7 DISTRIBUTION .....</b>	<b>7</b>
<b>5 DEFINITIONS.....</b>	<b>7</b>
<b>6 IMPLEMENTATION/POLICY COMPLIANCE .....</b>	<b>7</b>
<b>6.1 BEST PRACTICE.....</b>	<b>7</b>
<b>6.2 BARE BELOW THE ELBOW (BBE) .....</b>	<b>10</b>
<b>6.3 HAND HYGIENE FACILITIES .....</b>	<b>10</b>
<b>6.4 HAND HYGIENE SUPPLIES.....</b>	<b>11</b>
<b>6.5 GENERAL GOOD PRACTICE .....</b>	<b>11</b>
<b>6.6 MAINTAINING QUALITY .....</b>	<b>11</b>
<b>7 REFERENCES/LITERATURE.....</b>	<b>12</b>
<b>8 GETTING HELP .....</b>	<b>14</b>
<b>8.1 FURTHER INFORMATION AND SUPPORT .....</b>	<b>14</b>

9 RELATED POLICIES..... 14

10 INFORMATION, INSTRUCTION AND TRAINING..... 14

11 MAIN RELEVANT LEGISLATION ..... 14

APPENDIX 1 – HOW TO WASH YOUR HANDS..... 15

APPENDIX 2 – HOW TO USE ALCOHOL HANDRUB..... 16

APPENDIX 3 - HAND HEALTH AND SKIN CARE ..... 17

APPENDIX 4 – SURGICAL SCRUBBING ..... 18

APPENDIX 5 – SURGICAL RUBBING ..... 19

APPENDIX 6 – USE OF THE HAND WASH BASIN..... 20

APPENDIX 7 - WHO FIVE MOMENTS FOR HAND HYGIENE..... 21

**ABBREVIATIONS**

ABHR	Alcohol based hand rub
ANTT	Aseptic Non Touch Technique
BBE	Bare below the elbow
COSHH	Control of Substance Hazardous to Health
HCAI	Healthcare associated infection
HCW	Healthcare worker
IPC	Infection prevention and control
IPCT	Infection Prevention and Control Team
IPCMG	Infection Prevention and Control Management Group
SCIPs	Standard Infection Control Precautions
WBS	Welsh Blood Service
WHO	World Health Organization

## **1 POLICY STATEMENT**

- 1.1** The term hand hygiene used in this document refers to all of the processes, including hand washing and hand decontamination achieved using other products, e.g. alcohol-based hand rub (ABHR).
- 1.2** It is Velindre University NHS Trust policy to promote, provide and maintain a healthy and safe environment for the employees, patients, donors and visitors. The Trust's aim is therefore to promote hand hygiene within the clinical environment, in order to reduce the number of HCAs to an absolute minimum, thus promoting patient safety via a zero tolerance to non-compliance or poor practice.
- 1.3** This policy aims to provide evidence-based guidance that will identify the responsibilities individuals, the correct application of the procedure and compliance requirement.

## **2 SCOPE OF POLICY**

The policy applies to all staff, in all locations of Velindre University NHS Trust, including those with honorary contracts and student placement.

## **3 AIMS AND OBJECTIVES**

- 3.1** The aim of this policy is to provide comprehensive guidance on all aspects of hand hygiene to help prevent the spread of HCAI. Objectives include:
- Identifying correct provision of facilities
  - Use and provision of appropriate products
  - Required level of education and training for Trust staff, patients, donors and visitors
  - Managers accountabilities and responsibilities
  - Necessary monitoring of compliance through audit and reporting
  - Use of quality improvements methods to improve and maintain hand hygiene compliance
  - Description of the required processes
  - Importance and responsibility of healthcare workers (HCWs) to decontaminate hands at the point of care in the reduction of HCAI.

## **4 RESPONSIBILITIES**

It is the responsibility of every member of staff working in the health care setting to ensure adequate hand hygiene is performed where appropriate

### **4.1 The Chief Executive**

The Chief Executive has overall responsibility to ensure this policy is adhered to while the operational authority for appropriate and timely hand hygiene practice lies with the individual user and clinical/departmental managers. Compliance will be measured using observations and audits.

### **4.2 Director of Nursing, AHP's & Healthcare Scientists**

The Director of Nursing, AHP's & Healthcare Scientists has delegated Executive responsibility for Prevention and Control of Infection and is accountable for this to the Trust Executive Management Board. These responsibilities include ensuring that the organisation receives competent infection prevention and control advice and that adequate Infection Prevention and Control training, and monitoring is in place. This includes Hand Hygiene.

#### **4.3 Departmental Managers/ Clinical Directors / Clinical Managers**

Departmental Managers, Clinical Directors and Clinical Managers are accountable and responsible for:

- Ensure that all staff receive annual instruction/education on the principles of hand hygiene and SICPs.
- Ensure that an up-to-date, evidence-based hand hygiene policy is easily available to all staff.
- Maintain accurate and up to date training compliance records.
- Monitoring compliance with this policy and taking immediate corrective action if non-compliance is identified.
- Ensure participation in surveillance and audit programmes at local level and provide active support for presentation and improvement of hand hygiene compliance results.
- Monitoring and enforcing Bare Below Elbow (BBE) standards in all clinical settings at all times.
- Ensuring there are sufficient, trained and competent hand hygiene champions within departments who can ensure staff remain compliant with training, training is recorded on ESR, and monthly compliance audits are undertaken.
- Ensuring that adequate resources are in place for hand hygiene. This includes liaison with the estates and operational services teams.
- Providing sufficient approved hand decontamination products including paper towels, liquid soap, alcohol sanitiser and skin moisturiser.
- Making hand hygiene facilities readily available for all to use.
- Undertake a risk assessment to optimise patient/ donor and staff safety, consulting expert infection prevention and control guidance if/ as required related to application of this policy.
- Support staff to correct any action or intervention that may have resulted in transmission of infection.
- Ensure any staff with hand health concerns, including any skin irritation related to occupational hand hygiene or those who have become ill due to occupational exposure are appropriately referred e.g. Occupational Health, health and safety manager in the first instance.
- Health and Safety should be informed where the cause is considered to be work related since it may require reporting under RIDDOR.
- Ensure posters featuring when and how to perform hand hygiene are displayed.
- Ensuring appropriate use of gloves.

#### **4.4 All staff – (providing direct care in a health care setting) must:**

- Apply the principles of SICPs. All staff have a responsibility to ensure that they undertake adequate hand hygiene and encourage others who have patient contact to do so.
- Ensure all other staff/agencies apply the principles of SICPs.
- Explain to patients, donors and visitors any infection control requirements such as hand hygiene.
- Encourage patients, donors and visitors to question lack of hand hygiene by HCWs.
- Always practice the 5 moments of hand hygiene.
- Always remain bare below elbow within clinical areas.
- Always practice hand hygiene in line with required standards.
- Understand and apply the principles in this policy.
- Attend mandatory or update infection prevention and control education sessions.
- Highlight to colleagues any breaches in hand hygiene practices observed.
- Communicate the hand hygiene/ infection prevention and control practices to be carried out by colleagues, those being cared for, relatives and visitors, without breaching confidentiality.

- Do not provide care while at risk of transmitting infectious agents to others; if in doubt, they must consult their line manager, occupational health department, infection prevention and control team (IPCT) or health protection team.
- Encourage patients/ donors/ visitors to decontaminate their own hands appropriately.
- Provide patients with opportunities and supplies for hand hygiene after using toilets, before and after eating or drinking.
- Report to their manager inadequate facilities, equipment or products and deficits in their own knowledge or training.
- Report any incidents of non-compliance with hand hygiene that may have resulted in cross contamination.
- Report any illness which may be as a result of occupational exposure, to the line manager and the occupational health department (if applicable).
- Not provide direct patient/ donor care while infectious as this could cause harm. If in any doubt consult with your manager, General Practitioner, occupational health department or IPCT.
- Consider the elements of SICPs such as hand hygiene as an objective within staff continuing professional development ensuring continuous updating of knowledge and skills. Be aware of, and participate in, hand hygiene campaigns.
- Staff must inform managers immediately if their hands become sore or dermal integrity is breached.

#### **4.5 Infection Prevention and Control Team (IPCT) will:**

- Provide expert proactive and reactive information and advice to staff, patients, donors, relatives and carers in respect of healthcare associated infections and hand hygiene.
- Ensure the effective auditing of infection prevention practices, including hand hygiene.
- Review the hand hygiene policy in line with national guidelines.
- Review, in collaboration with others, the status of the environment including facilities for promoting and supporting effective hand hygiene.
- Facilitate IPC champions, ensuring they are empowered to continually raise the standards of infection prevention and control, including hand hygiene.
- Ensure training is available for all groups of staff. Set the training and education standards for hand hygiene and ensure delivery of a robust train the trainer programme for hand hygiene.
- Act as a contact for guidance and support when advice relating to hand hygiene is required.
- Investigate incidents of non-compliance relating to hand hygiene.
- Undertake regular validation hand hygiene audits within the Trust and feedback audit results to managers within a timely manner.
- Ensure compliance with the principle of bare below the elbow forms part of the IPC hand hygiene audit and will be included in audit feedback.
- Provide support and advice to staff on maintaining good hand skin health (Appendix 3).
- Provide advice on individual risk assessments for performing hand hygiene and the site and provision of ABHR.
- Provide advice on the provision, type and site of hand wash sinks and facilities.
- Provide support to departmental hand hygiene champions so that they can audit staff adherence to hand hygiene and BBE.
- Provide support on the wards/ departments to monitor standards and compliance, identifying areas of concern and risk, and escalating concerns so that appropriate management action can be taken to maintain the highest standards via the divisional IP&C Groups or Trust Infection Prevention Control Management Group (IPCMG) as necessary.

#### 4.6 Patient, Donor and Visitor, involvement

Patients, donors and visitors should be seen as partners in good hand hygiene practice though they are not the responsible for HCAI reduction. Therefore:

- Patients must be offered the opportunity to decontaminate their hands as they require but especially on arrival at clinical areas and after toileting and before and after consumption of food or drink.
- Those with invasive devices insitu should be encouraged to clean their hands frequently and be advised not to touch these sites whilst the devices are in place.
- Relatives and visitors should be given the opportunity and be actively encouraged to decontaminate their hands, either by washing with soap and water or ABHR:
  - Before/upon and after entering clinical areas
  - Before and after visiting patients in isolation
  - Before and after participating in any form of patient care or contact
  - When leaving the ward or department
- Hand hygiene compliance data should be displayed for patients, visitors and donors to view in the clinical areas.

#### 4.7 Distribution

The policy will be available via the Trust intranet site and from the IPCT. Where the staff do not have access to the intranet their line manager must ensure that they have access to a copy of this policy.

### 5 DEFINITIONS

**Hand hygiene** - aims to remove transient micro-organisms carried on the hands (acquired by direct contact with the environment and/or with other people) and/or reduce resident micro-organisms (living permanently on the hands as part of normal flora).

**Bare Below Elbow** - is Welsh Government national standard requirement to improve the effectiveness of hand hygiene performed by HCWs. The effectiveness of hand hygiene is improved when: skin is intact, nails are natural, short and unvarnished; hands and forearms are free of jewellery (with the exception of a plain wedding band) and sleeves are above the elbow.

### 6 IMPLEMENTATION/POLICY COMPLIANCE

#### 6.1 Best Practice

Hand hygiene is considered the most important practice in reducing the transmission of infectious agents that cause HCAs.

Hand washing sinks must only be used for hand hygiene and must not be used for the disposal of other liquids.

##### 6.1.1 Before performing hand hygiene

- Expose forearms (BBE).
- Remove all hand and wrist jewellery (a single, plain metal finger ring is permitted but should be removed (or moved up) during hand hygiene).
- Bracelets or bangles, such as the Kara which are worn for religious reasons, should be able to be pushed higher up the arm and secured in place to enable effective hand hygiene which includes the wrists.
- Ensure fingernails are clean and short, and do not wear artificial nails or nail varnish/gel.
- Cover all cuts or abrasions with a waterproof dressing.

### 6.1.2 **When to perform hand hygiene**

Hand hygiene is considered the single most important infection control activity in all clinical or care settings.

Hands should be decontaminated at a range of times in order to prevent HCAI. The most important times during care delivery and daily routines when this should occur are described in '**5 moments for Hand Hygiene**'.

- Before patient contact (and before entering an isolation room)
- Before a clean / aseptic task is undertaken.
- After body fluid exposure risk
- After patient contact
- After contact with the patient environment (and before leaving an isolation room)

Even if gloves have been worn, hand hygiene **must** be performed before and after donning & doffing gloves. Hands can still become contaminated whilst wearing or on removal of gloves, and so must be cleaned appropriately.

It should also be noted that hand hygiene will have to be performed **between tasks on the same patient**.

The point of care is the crucial moment for hand hygiene. The point of care represents the time and place at which there is highest likelihood of transmission of microorganisms from the hands of HCW's to patients and donors.

In addition to the critical moments there are situations/occasions where hand hygiene should be performed to reduce the risk to patients/ donors and HCWs. Examples of additional situations when hands must be decontaminated are:

- Before commencing work/after leaving a work area.
- Before preparing, handling or eating food.
- Before and after handling/administering medicines.
- Before entering/ leaving laboratory area.
- Between tasks on the same patient if there is a risk of contamination from one site to another.
- Following handling of patient notes or equipment.
- After handling contaminated laundry and waste, including sluice room activities.
- After visiting the toilet.
- Before and after leaving isolation rooms/bays.
- After cleaning equipment or the environment.
- Personal contamination e.g. blowing your nose, sneezing/coughing into your hand.
- After removing personal protective equipment including gloves.
- Ensure any cuts / broken skin are covered with a waterproof dressing.

Wash hands with liquid soap and water if:

- Hands are visibly soiled or dirty.
- Caring for patients with vomiting and/ or diarrhoea.
- Where infection with a spore forming organism e.g. *Clostridioides difficile* or with a gastroenteritis virus e.g. Norovirus is suspected/proven, hand hygiene must be carried out with liquid soap and water although it can be followed by ABHR. In all other circumstances, use ABHRs for routine hand hygiene during care. Where running water is unavailable, or hand hygiene facilities are lacking, staff may use hand wipes followed by ABHR and should wash their hands at the first opportunity.

For how to wash hands, see Appendix 1.  
For how to hand rub, see Appendix 2.

### **6.1.3 Hand hygiene and jewellery**

It has been shown that contamination of jewellery, particularly rings with stones and/or jewellery of intricate detail, can occur (Trick et al 2013, epic 3, 2014). Jewellery must be removed when working in clinical care settings to prevent the spread of microorganisms by contact with contaminated jewellery.

- Staff providing care and those in the clinical setting must remove jewellery at the start of the working day.
- It is acceptable to wear plain wedding bands however these must be moved/removed when hand hygiene is being performed in order to reach the bacteria which can harbour underneath them and dried effectively.
- Medi Alerts for staff where possible should not be in the form of bracelets due to the potential impact to hand hygiene

The wearing of plaster casts or splints can affect hand washing therefore the staff member cannot decontaminate their hands effectively and should not be undertaking clinical duties. A risk assessment with the manager and occupational health is required for staff working in clinical areas.

### **6.1.4 Hand care**

Hand care is important to protect the skin from drying and cracking. Cracked skin may harbour microorganisms and broken areas can become contaminated, particularly when exposed to blood and body fluids. The frequent use of some hand hygiene agents may cause damage to the skin and alter normal hand flora. Skin damage and dryness is generally associated with the detergent base of the preparation and/ or poor hand washing technique e.g. application of soap to dry hands, or inadequate rinsing of soap from the hands. The irritant and drying effects of liquid soap and antiseptic soap preparations have been identified as one of the reasons why HCWs fail to adhere to hand hygiene guidelines (epic 3, 2014) (Appendix 3).

- Hand moisturiser can be applied to care for the skin on hands. However, only individual tubes of hand moisturiser for single person use or hand moisturiser from wall mounted dispensers should be used. Communal tubs must be avoided as these may contain bacteria over time, and lead to contamination of hands. Moisturisers used should not affect the action of hand hygiene products or the integrity of gloves.
- Adequate hand drying plays a critical step in the hand hygiene procedure by removing any remaining residual moisture that may facilitate transmission of microorganisms. Hands that are not dried properly can become dry and cracked, leading to an increased risk of harbouring microorganisms. Dry hands thoroughly after hand washing, using disposable paper towels.
- Report any skin problems and/ or sensitivities to the hand decontamination products supplied to your Manager and Occupational Health in order that appropriate skin care can be undertaken and the risks of harbouring microorganisms while providing care for others can be avoided.

### **6.1.5 Surgical hand antisepsis**

Surgical scrubbing/ rubbing applies to those undertaking surgical and some invasive procedures. The most commonly used products contain Chlorhexidine gluconate or povidone-iodine. Products containing these agents act by lifting transient micro-organisms from the skin and destroying both transient and some resident micro-organisms. These should be used when a prolonged reduction in numbers of resident flora is required for invasive procedures (surgical aseptic non touch technique (aseptic non touch technique

(ANTT®)) requiring maximal sterile barrier precautions, e.g. central line insertion, surgery etc.).

- Perform surgical scrubbing/ rubbing before donning sterile theatre garments or at other times, e.g. before inserting central vascular access devices.
- Remove all hand and wrist jewellery.
- Single-use nail brushes must only be used for decontaminating nails.
- ABHR can be used between surgical procedures if licensed for this use.

Follow the technique in Appendix 5 for surgical scrubbing.

Follow the technique in Appendix 6 for surgical rubbing.

## 6.2 Bare below the elbow (BBE)

All staff will adopt a “bare below the elbows” dress code whenever they are engaged in a direct patient/ donor care activity (All Wales NHS Dress Code), to ensure adequate hand hygiene can be performed when working in clinical areas. This will allow hands to be decontaminated easily and thoroughly.

- Remove all wrist watches, wrist and hand jewellery (with the exception of a plain wedding ring) at the beginning of each clinical shift before regular hand decontamination begins.
- Staff should not wear rings with ridges or stones as they harbour bacteria and interfere with the wearing of gloves (rings may also provide a site for contact dermatitis).
- If a plain metal wedding ring is worn; these must be moved/removed when performing hand hygiene in order to reach bacteria which can harbour underneath it.
- Ensure nails are kept short (nail varnish, gel or false nails must not be worn).
- Work clothes should not go past the elbow. Coats should be removed, and long sleeves should be rolled up exposing the wrists and elbows.
- The wrists should be included when washing the hands; forearms should be included if they have been contaminated.
- Ensure cuts and abrasions are covered with a waterproof dressing.

All staff should be prepared to approach their colleagues if they are not complying with BBE.

## 6.3 Hand hygiene facilities

In order to reduce the associated risks of Legionellosis and *Pseudomonas aeruginosa* contamination a hand wash sink/ basin should only be used for that purpose (Appendix 6) ABHR will be supplied and used in accordance with the World Health Organization (WHO) and:

- Will be available at the point of care and either free standing for use on trolleys or wall mounted sited at key points in all clinical environments.
- Will be available at entrances to all clinical environments and in areas within the facility which have been risk assessed as safe from theft or misuse e.g. canteen entrance, key entry points of the building or department that are observed.
- Wall mounted containers will be kept clean as per operational cleaning schedule with particular attention paid to the outlet nozzle to prevent build-up of product.
- ABHR supplies must be stored in accordance with COSHH regulations.
- Patients unable to wash their hands should be offered assistance to do so, especially after toileting and before eating. This can be aided by the use of hand wipes available within the clinical areas.

#### **6.4 Hand hygiene supplies**

The availability of supplies for hand hygiene is essential.

- Hand hygiene products (e.g. liquid soap, antiseptic hand wash solution and ABHR), should preferably be wall mounted in easy to use, and easy to clean, dispensers that contain single use, disposable cartridge sets, particularly in clinical or communal care areas. In some non-acute community care settings free standing bottles of liquid soap are acceptable.
- Wall mounted moisturising cream should be available in all clinical areas.
- Nozzles of solution bottles/containers should always be clean and free of any congealed product. Bottles should not be reused and the 'topping up' of bottles that contain solutions should not occur.
- Soft, user friendly disposable paper towels for hand drying, dispensed from a wall mounted, easy to use clean holder.
- Supplies of paper towels and other hand hygiene supplies should always be stored in a clean dry area prior to use.
- Foot operated waste bins must be available at point of hand hygiene.
- Estates and operation services staff are important partners in ensuring that hand hygiene facilities are adequate and that supplies are mounted appropriately.  
Any issues with the hand hygiene supplies should be brought to the attention of operational services manager.

#### **6.5 General Good Practice**

- Effective communication between all members of the health care team is imperative for patient safety.
- Health and safety issues, related to staff, patients/ donors and visitors should also be considered in relation to products used for hand hygiene, e.g. drips or spillages from ABHR and any risks of slips, falls or ingestion of products. Risk assessments should be carried out locally to highlight/manage relevant issues.
- Control of Substances Hazardous to Health (COSHH) and product data sheets should be referred to in order to ensure safe use of/exposure to products being used for hand hygiene.

#### **6.6 Maintaining quality**

Velindre University NHS Trust actively supports the WHO 5 Moments (Appendix 7) and other initiatives to improve and maintain standards of hand hygiene. Promotional materials produced by the Trust must be visible in all clinical areas and clearly displayed. Staff should act as role models and be able to demonstrate on-going commitment to hand hygiene.

Observational audits of compliance utilising validated audit tools e.g. WHO 'Your 5 moments for hand hygiene' (Appendix 7) are carried out by departmental staff and Welsh Blood Service (WBS) teams overseen and trained by the IPC team. The IPC team process and feedback the observational audit results at both Velindre Cancer Centre & WBS on a monthly basis. Audits of hand hygiene facilities and BBE are undertaken by the IPCT and WBS team and are reported via the Infection Prevention and Control Management Group (IPCMG). Departmental audits are undertaken and fed back through divisional IPC meeting in both WBS and VCC, as are IPCT validation audit results, and then to IPCMG. Results for VCC are also uploaded onto the Trust Performance Dashboard.

As a quality indicator, poor compliance will be highlighted and an action plan for improvement agreed with the manager of the area.

## 7 REFERENCES/LITERATURE

Awaji, M.A. Al-Surimi, K. (2016) 'Promoting the Role of Patients in Improving Hand Hygiene Compliance Amongst Health Care Workers'. *BMJ Qual Improv Rep*.5(1): u210787.w4336.

Centers for Disease Control and Prevention. (2016) '*Clean Hands Count*'. Available at: <https://www.cdc.gov/handhygiene/campaign/index.html>

Chatfield, SL. DeBois, K. Nolan, R. Crawford, H. Hallam, J.S. (2017) 'Hand Hygiene Among Healthcare Workers: A Qualitative Meta Summary using the GRADE-CERQual Process'. *J Infect Prev*. May; 18(3):104-120.

Department of Health (2005) 'Department of Health, Saving Lives: A Delivery Programme to Reduce Healthcare Associated Infection including MRSA'. London; 2005.

Ellingson, K. Haas, J.P. Aiello, A.E. Kusek, L. Maragakis, L. Olmsted, R.N. Perencevich, E. Polgreen, P.M. Schweizer, M.L. Trexler, P. VanAmringe, M. Yokoe, D.S. (2014) 'Strategies to Prevent Healthcare-Associated Infections through Hand Hygiene'. *Infection control and hospital epidemiology*, Vol. 35(8), pp. 937-960.

Gould, D.J. Creedon, S, Jeanes, A. Drey, N.S. Chudleigh, J. Moralejo D. (2017a) 'The Hawthorne and Avoidance Effects in Hand Hygiene Practice and Research: Methodological Reconsideration'. *Journal of Hospital Infection* 95: 169–174.

Gould, D.J. Moralejo, D. Drey, N.S. Chudleigh, J.H. Taljaard, M. (2017b) 'Interventions to Improve Hand Hygiene Compliance in Patient Care (second update)'. *Cochrane Database of Systematic Reviews* 9: CD005186.

Health and Social Care Act 2008: code of practice on the prevention and control of infections and related guidance. Updated 13 December 2022

<https://www.gov.uk/government/publications/the-health-and-social-care-act-2008-code-of-practice-on-the-prevention-and-control-of-infections-and-related-guidance/health-and-social-care-act-2008-code-of-practice-on-the-prevention-and-control-of-infections-and-related-guidance>

[Loveday HP, Wilson JA, Pratt RJ et al. epic3: National evidence-based guidelines for preventing healthcare-associated infections in NHS hospitals in England \(2014\)](#)

National Infection Prevention and Control Manual. Available at

<https://phw.nhs.wales/services-and-teams/harp/infection-prevention-and-control/nipcm/>

Neo, J.R. Sagha-Zadeh, R. Vielemeyer, O. Franklin, E. (2016) 'Evidence-Based Practices to Increase Hand Hygiene Compliance in Health Care Facilities: An Integrated Review'. *American Journal of Infection Control* 44; 691-704.

NHS dress code. <https://www.gov.wales/nhs-dress-code>

O'Neill, J. (2016) 'Tackling Drug-Resistant Infections Globally: Final Report and Recommendations. The review on Antimicrobial Resistance'; London: HM Government and the Wellcome Trust.

Pittet, D., Hugonnet, S., Harbarth, S., et al. (2000) Effectiveness of a Hospital-Wide Programme to Improve Compliance with Hand Hygiene. *Infection Control Programme*. *Lancet*, 356, 1307-1312.

[https://doi.org/10.1016/S0140-6736\(00\)02814-2](https://doi.org/10.1016/S0140-6736(00)02814-2)

Public Health Wales. (2017) 'National Point Prevalence Survey of Healthcare Associated Infection, Device Usage and Antimicrobial Prescribing'. Published by Public Health Wales NHS Trust, Capital Quarter 2, and Tyndall Street, Cardiff CF10 4BZ.

NICE (2014) Infection Prevention and Control. Quality statement 3. Hand decontamination.

<https://www.nice.org.uk/guidance/qs61/chapter/quality-statement-3-hand-decontamination>

Srigley, J.A. Furness, C.D. Gardam, M. (2016) 'Interventions to Improve Patient Hand Hygiene: a Systematic Review'. *Journal of Hospital Infection*; 94.23e29.

Trick, W.E. et al. 2013. Impact of ring wearing on hand contamination and comparison of hand hygiene agents in a hospital. *Clin. Infect. Dis.* 36:1383-1390.

Welsh Healthcare Associated Infection Programme, National Model Policies for Infection Prevention and Control. Part 1: Standard Infection Control Precautions. August 2014. Available at:

[https://www2.nphs.wales.nhs.uk/WHAIPDocs.nsf/61c1e930f9121fd080256f2a004937ed/24cf7af1a131dd6f80257abd0048f3a1/\\$FILE/SICPS\\_FinalV2\\_Aug\\_14.pdf](https://www2.nphs.wales.nhs.uk/WHAIPDocs.nsf/61c1e930f9121fd080256f2a004937ed/24cf7af1a131dd6f80257abd0048f3a1/$FILE/SICPS_FinalV2_Aug_14.pdf)

Winckworth-Prejsnar, K. Nardi, E.A. McCanney, J. Stewart, F.M. Langbaum, T. Gould, B.J. Fitzgerald, C.L. Carlson, R.W. (2017) 'Ensuring Patient Safety and Access in Cancer Care'. *J Natl Compr Canc Newtw. Dec*; 15 (12): 1460-1464.doi: 10.600/jnccn2017.7049.

WHO '5 moments for hand hygiene':

[https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/infection-prevention-and-control/your-5-moments-for-hand-hygiene-poster.pdf?sfvrsn=83e2fb0e\\_16](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/infection-prevention-and-control/your-5-moments-for-hand-hygiene-poster.pdf?sfvrsn=83e2fb0e_16)

World Health Organization. (2009a) 'WHO Guidelines on Hand Hygiene in Health Care: First Global Patient Safety Challenge: Clean Care is Safer Care'. Geneva: WHO.

Available at: <https://www.who.int/publications/i/item/9789241597906>

World Health Organization. (2009b) 'A Guide to the Implementation of the WHO Multimodal Hand Hygiene Improvement Strategy'. Geneva: WHO.

[https://cdn.who.int/media/docs/default-source/integrated-health-services-\(ihs\)/infection-prevention-and-control/core-components/ipc-cc-mis.pdf?sfvrsn=5e06c3d5\\_10&download=true](https://cdn.who.int/media/docs/default-source/integrated-health-services-(ihs)/infection-prevention-and-control/core-components/ipc-cc-mis.pdf?sfvrsn=5e06c3d5_10&download=true)

World Health Organization. (2016) 'Health Care without Avoidable Infections: the Critical Role of Infection Prevention and Control'. Geneva: WHO.

<http://www.who.int/iris/handle/10665/246235>

World Health Organization. (2016a) 'Guidelines on Core Components of Infection Prevention and Control Programmes at the National and Acute Health Care Facility Level'. Geneva: WHO.

World Health Organization. (2016b) 'SAVE LIVES: Clean Your Hands WHO's Global Annual Campaign Advocacy Toolkit'. Geneva: WHO.

## **8 GETTING HELP**

### **8.1 Further information and support**

Velindre IPCT: 02920196129

## **9 RELATED POLICIES**

This policy should be read in conjunction with:

- All Wales NHS Dress Code  
<https://www.gov.wales/sites/default/files/publications/2019-03/all-wales-nhs-dress-code-free-to-lead-free-to-care.pdf>
- National Infection Prevention and Control Manual. Available at  
<https://phw.nhs.wales/services-and-teams/harp/infection-prevention-and-control/nipcm/>

## **10 INFORMATION, INSTRUCTION AND TRAINING**

### **10.1 Training**

- All staff working in clinical areas need to be trained in hand hygiene.

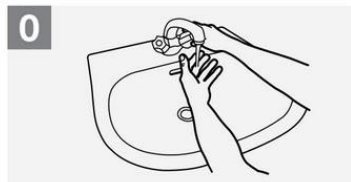
## **11 MAIN RELEVANT LEGISLATION**

- The Health and Social Care Act. (2008) 'Code of Practice for the NHS on the Prevention and Control of Health Care Associated Infections and Related Guidance'. 2015 update. Department of Health.
- Welsh Government (May 2014). Code of Practice for the Prevention and Control of Healthcare Associated Infections.  
<https://www.gov.wales/sites/default/files/publications/2019-06/code-of-practice-for-the-prevention-and-control-of-healthcare-associated-infections.pdf>
- Welsh Government (2024) Healthcare associated infections and antimicrobial resistance goals 2024 to 2025 (WHC/2024/038). Our expectations for health boards and trusts to reduce care related illness and resistance to antibiotics.  
<https://www.gov.wales/healthcare-associated-infections-and-antimicrobial-resistance-goals-2024-2025-whc2024038>

# How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

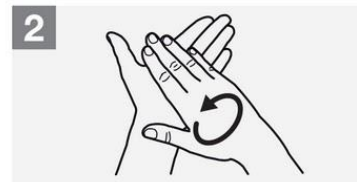
 Duration of the entire procedure: 40-60 seconds



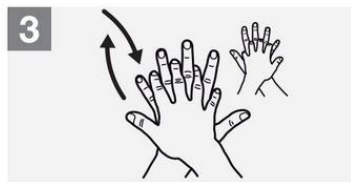
0 Wet hands with water;



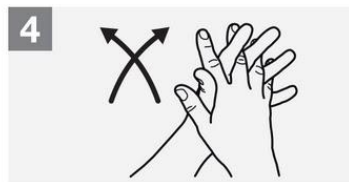
1 Apply enough soap to cover all hand surfaces;



2 Rub hands palm to palm;



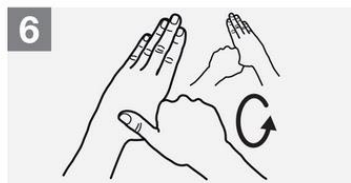
3 Right palm over left dorsum with interlaced fingers and vice versa;



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;



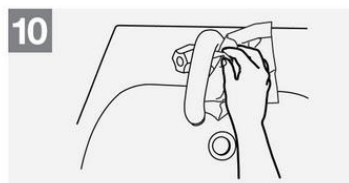
7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



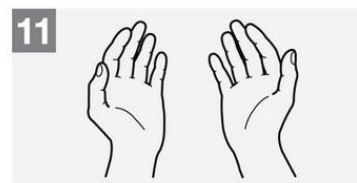
8 Rinse hands with water;



9 Dry hands thoroughly with a single use towel;



10 Use towel to turn off faucet;



11 Your hands are now safe.



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SAVE LIVES

Clean Your Hands

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# How to Handrub?

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

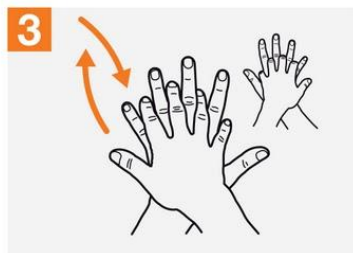
 **Duration of the entire procedure: 20-30 seconds**



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



Rub hands palm to palm;



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



Palm to palm with fingers interlaced;



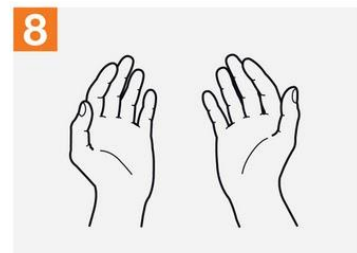
Backs of fingers to opposing palms with fingers interlocked;



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



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



Once dry, your hands are safe.



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### Appendix 3 - Hand Health and Skin Care

Care is required to protect the hands from the adverse effects of hand decontamination practice. The frequent use of some hand hygiene agents may cause damage to the skin and alter normal hand flora. Skin damage and dryness is generally associated with the detergent base of the preparation and/or poor hand washing technique e.g. application of soap to dry hands, or inadequate rinsing of soap from the hands. The irritant and drying effects of liquid soap and antiseptic soap preparations have been identified as one of the reasons why HCWs fail to adhere to hand hygiene guidelines (epic 3, 2014).

In order to achieve effective hand hygiene, it is important to look after the skin and fingernails. Sore hands are associated with increased colonisation by potentially pathogenic micro-organisms and increase risk of transmission. Damaged or dry skin leads to loss of a smooth skin surface and increases the risk of skin colonisation with resistant organisms such as Meticillin-resistant *Staphylococcus aureus* (MRSA). Continuing damage to the skin may result in cracking and weeping, exposing the HCW to increased infection risk, which can lead to sickness absence due to dermatitis.

Skin care, through the appropriate use of hand lotion or moisturisers added to hand hygiene preparations, is an important factor in maintaining skin integrity, encouraging adherence to hand decontamination practices and assuring the health and safety of HCWs. Only use the products available in the clinical areas, as these have been specifically designed not to interact with the soaps and ABHR.


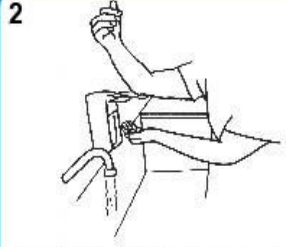
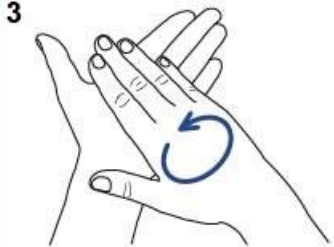
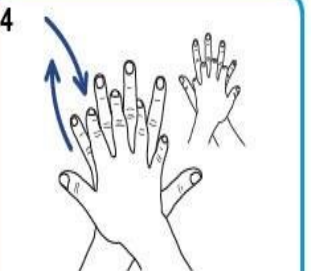

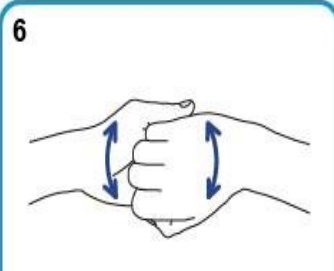
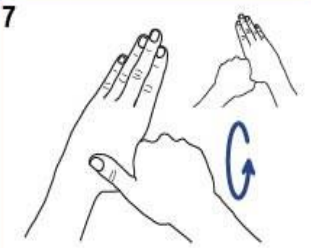
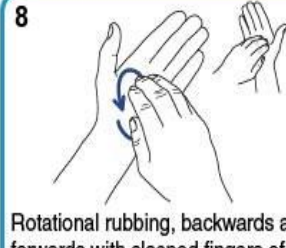

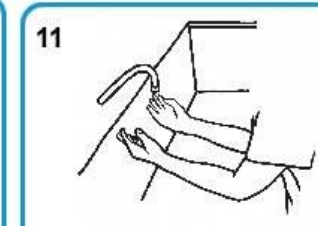

To maintain skin health:

- It is essential that only approved soap products are used, and that staff carefully follow correct hand hygiene techniques.
- Drying (pat don't rub etc.)
- Use ABHR containing an emollient.
- Staff with acute or chronic skin lesions/conditions/reactions or possible dermatitis **must** seek advice from the Occupational Health Department at the time that they have the problem.
- Cuts and abrasions must be covered with a water-impermeable dressing, prior to clinical contact.
- All clinical areas must ensure that adequate supplies of wall-mounted moisturiser are available for staff use. This is more cost-effective than sickness-absence due to damaged skin.
- Staff should regularly use moisturiser to maintain skin integrity. The most effective use of moisturiser is before breaks and at the end of a shift, when it can be left on the hands for a greater period of time.
- Use gloves appropriately and change frequently.

## Appendix 4 – Surgical Scrubbing

Step by step images for surgical hand preparation technique using antimicrobial soap

Undertake Appendix 1 prior to starting scrub.

<p>1</p>  <p>Wet hands and forearms*</p>	<p>2</p>  <p>Put antimicrobial liquid soap onto the palm of each hand/arm using the elbow of your other arm to operate the dispenser</p>	<p>3</p>  <p>Rub hands palm to palm. Steps 3 - 8 should take a minimum of 2 minutes</p>
<p>4</p>  <p>Right palm over the back of the other hand with interlaced fingers and vice versa.</p>	<p>5</p>  <p>Palm to palm with fingers interlaced.</p>	<p>6</p>  <p>Backs of fingers to opposing palms with fingers interlocked.</p>
<p>7</p>  <p>Rotational rubbing of left thumb clasped in right palm and vice versa.</p>	<p>8</p>  <p>Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa. Rinse hands between steps 8 - 9, passing them through the water in one direction only.</p>	<p>9</p>  <p>Put antimicrobial liquid soap onto the palm of your left hand using the elbow of your other arm to operate the dispenser. Use this to scrub the right arm for 1 minute using a rotational method keeping the hand higher than the arm at all times.</p>
<p>10</p> <p>Repeat the process for the other hand and arm keeping hands above elbows at all times.</p> <p>If the hand touches anything at any time, the scrub must be lengthened by 1 minute for the area that has been contaminated.</p>	<p>11</p>  <p>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.</p>	<p>12</p>  <p>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.</p>

## Appendix 5 – Surgical Rubbing

The hand rubbing technique for surgical hand preparation must be performed on 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).

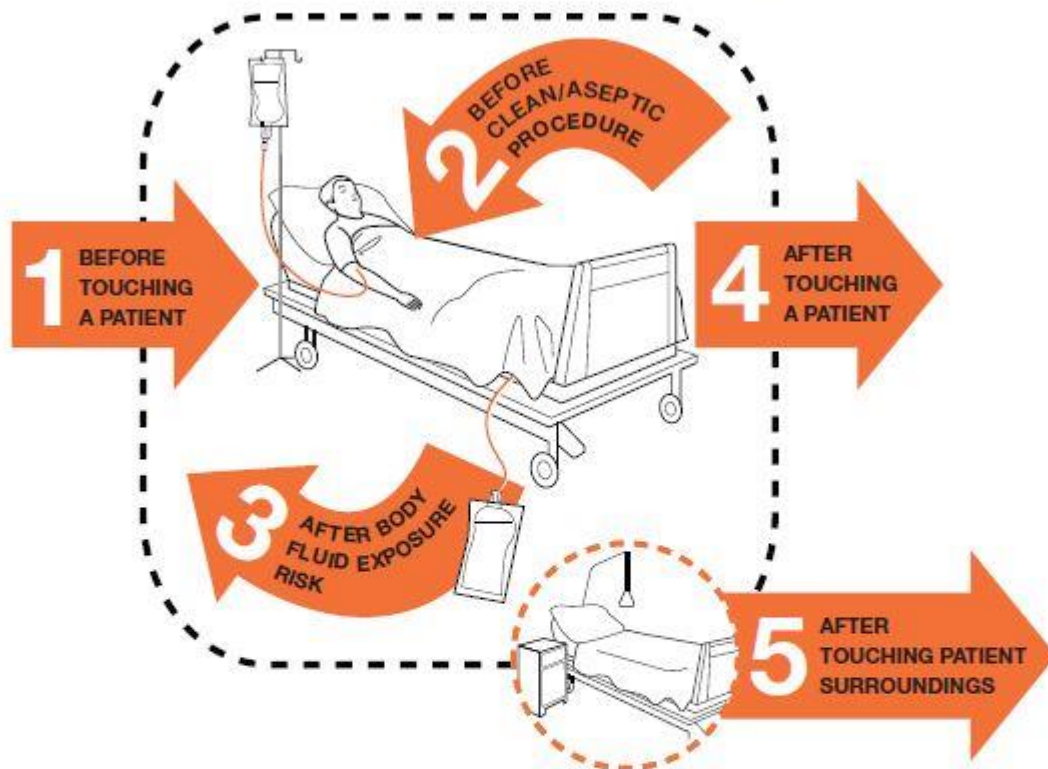
Surgical procedures may be carried out one after the other without the need for hand washing, provided that the hand rubbing technique or surgical hand preparation is followed (images 1-15).



## Appendix 6 – Use of the Hand Wash Basin

- Hand washing sinks should not be fitted with plugs in order to avoid them filling with water, hand hygiene should be performed under running water.
- Mixer taps or thermostatic mixer valves are preferred to provide the correct temperature of water for performing hand hygiene.
- The tap must not directly expel/drain water straight down the plug hole. It should be sited appropriately to ensure water hits the sink basin as it flows out, otherwise aerosols from the drainage system can splash back onto the user.
- Do not dispose of body fluids or any other fluids in the clinical wash-hand basin – use the sluice in the dirty utility area.
- Do not use hand wash basins for storing used equipment awaiting decontamination or wash any patient equipment in hand wash basins.
- Taps can be wrist, elbow or automatically operated, Velindre Cancer Centre will replace automatic taps with wrist or elbow operated during clinical area development or refurbishment in accordance with its Water Safety Action Plan.
- Do not touch the spout outlet when washing hands.
- Hand wash sinks must not have an overflow.
- Use all hand wash stations regularly or flush in accordance with the Legionella management scheme.
- Ensure correct clean and dirty separation is maintained along with use of sink free zones for high risk procedure areas, for example, where intravenous drugs are being prepared.
- Hand wash sinks must conform to standards as uneven or damaged surfaces may harbour microorganisms.
- Hands free (i.e. pedal operated) waste receptacles should be close at hand.
- Designated hand hygiene sinks should be clearly labelled 'hand hygiene only'.
- Advise patients that sinks should not be used for anything other than hand hygiene: i.e. not for cleaning teeth or drinking water and should not be used for storage of patients soap etc.

# Your 5 Moments for Hand Hygiene



<b>1</b>	<b>BEFORE TOUCHING A PATIENT</b>	<b>WHEN?</b>	Clean your hands before touching a patient when approaching him/her.
		<b>WHY?</b>	To protect the patient against harmful germs carried on your hands.
<b>2</b>	<b>BEFORE CLEAN/ASEPTIC PROCEDURE</b>	<b>WHEN?</b>	Clean your hands immediately before performing a clean/aseptic procedure.
		<b>WHY?</b>	To protect the patient against harmful germs, including the patient's own, from entering his/her body.
<b>3</b>	<b>AFTER BODY FLUID EXPOSURE RISK</b>	<b>WHEN?</b>	Clean your hands immediately after an exposure risk to body fluids (and after glove removal).
		<b>WHY?</b>	To protect yourself and the health-care environment from harmful patient germs.
<b>4</b>	<b>AFTER TOUCHING A PATIENT</b>	<b>WHEN?</b>	Clean your hands after touching a patient and her/his immediate surroundings, when leaving the patient's side.
		<b>WHY?</b>	To protect yourself and the health-care environment from harmful patient germs.
<b>5</b>	<b>AFTER TOUCHING PATIENT SURROUNDINGS</b>	<b>WHEN?</b>	Clean your hands after touching any object or furniture in the patient's immediate surroundings, when leaving – even if the patient has not been touched.
		<b>WHY?</b>	To protect yourself and the health-care environment from harmful patient germs.



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