# Hand Hygiene Guideline

## HSE West, Mid-Western Regional Hospitals, Limerick.

### Hand Hygiene Guideline

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# Table of Contents

1.0 GUIDELINE STATEMENT..............................................................................3
2.0 PURPOSE ......................................................................................................3
3.0 SCOPE OF GUIDELINE..............................................................................3
4.0 LEGISLATION/OTHER RELATED POLICIES................................................3
5.0 GLOSSARY OF TERMS AND DEFINITIONS................................................3
  5.1 Glossary Of Definitions ......................................................................3
  5.2 Glossary of Terms/ Abbreviations...........................................................6
6.0 ROLES AND RESPONSIBILITIES .................................................................6
7.0 GUIDELINE.....................................................................................................7
  7.1 Hand Hygiene Opportunities (5 Moments for Hand Hygiene) ....7
  7.2 Different Levels of Hand Hygiene: .............................................9
    7.2.1 Social Hand hygiene: ...............................................................9
    7.2.2 Antiseptic Hand Hygiene .........................................................10
    7.2.3 Surgical Hand hygiene.............................................................11
  7.3 Alcohol Hand gels/rubs .................................................................12
  7.4 Artificial nails and nail polish.........................................................12
  7.5 Jewellery ..............................................................................................12
  7.6 Prevention of skin damage resulting from hand hygiene ...........13
  7.7 Facilities ..............................................................................................13
  7.8 Education .............................................................................................14
8.0 IMPLEMENTATION PLAN.......................................................................14
9.0 REVISION AND AUDIT .....................................................................15
10.0 REFERENCES/ BIBLIOGRAPHY.............................................................16
11.0 APPENDICES.............................................................................................20
  Appendix I WHO 5 moments of Hand Hygiene Poster, available in all clinical areas in MWRHs..............................................................................20
  Appendix II Levels of Hand Hygiene (SARI 2004).............................21
  Appendix III Handwasing Technique ...............................................22
  Appendix IV Hand Hygiene Poster demonstrating hand hygiene technique .................................................................................................................23
  Appendix V Surgical Hand Scrub technique using a conventional antiseptic hand scrub agent (AORN 1999).........................................................24
  Appendix VI Poster demonstrating Alcohol Gel technique (Available in all Clinical areas MWHRs)..............................................................25
  Appendix VII Signature Sheet ...................................................................26
1.0 GUIDELINE STATEMENT
This guideline applies to best practice in hand hygiene practices within the hospital complex.

2.0 PURPOSE
- To maintain patient safety at all times.
- To prevent the transmission of cross infection.
- To highlight the importance of hand hygiene in preventing the transmission of infection.
- To promote the successful implementation of hand hygiene practices by the healthcare worker, patient and the public.
- To ensure evidence based research underpins best practice.

3.0 SCOPE OF GUIDELINE
This guideline applies to the Mid-Western Regional Hospitals healthcare staff involved in patient care.

4.0 LEGISLATION/OTHER RELATED POLICIES
SARI Infection Control Subcommittee (August 2004), Guidelines for Hand Hygiene in Irish Health Care Settings.


5.0 GLOSSARY OF TERMS AND DEFINITIONS

5.1 Glossary Of Definitions
Hand hygiene products
Alcohol-based (hand) rub. An alcohol-containing preparation (liquid, gel or foam) designed for application to the hands to inactivate microorganisms and/or temporarily suppress their growth. Such preparations may contain one or more types of alcohol, other active ingredients with excipients, and humectants.

Antimicrobial (medicated) soap. Soap (detergent) containing an antiseptic agent at a concentration sufficient to inactivate microorganisms and/or temporarily suppress their growth. The detergent activity of such soaps may also dislodge transient microorganisms or other contaminants from the skin to facilitate their subsequent removal by water.

Antiseptic agent. An antimicrobial substance that inactivates microorganisms or inhibits their growth on living tissues. Examples include alcohols, chlorhexidine gluconate (CHG), chlorine derivatives, iodine, chloroxylenol (PCMX), quaternary ammonium compounds, and triclosan.
Detergent (surfactant). Compounds that possess a cleaning action. They are composed of a hydrophilic and a lipophilic part and can be divided into four groups: anionic, cationic, amphoteric, and non-ionic. Although products used for handwashing or antiseptic handwash in health care represent various types of detergents, the term “soap” will be used to refer to such detergents in these guidelines.

Plain soap. Detergents that contain no added antimicrobial agents, or may contain these solely as preservatives.

Waterless antiseptic agent. An antiseptic agent (liquid, gel or foam) that does not require the use of exogenous water. After application, the individual rubs the hands together until the skin feels dry.

Hand hygiene practices

Antiseptic handwashing. Washing hands with soap and water, or other detergents containing an antiseptic agent.

Antiseptic handrubbing (or handrubbing). Applying an antiseptic handrub to reduce or inhibit the growth of microorganisms without the need for an exogenous source of water and requiring no rinsing or drying with towels or other devices.

Hand antisepsis/decontamination/degerming. Reducing or inhibiting the growth of microorganisms by the application of an antiseptic handrub or by performing an antiseptic handwash.

Hand care. Actions to reduce the risk of skin damage or irritation.

Handwashing. Washing hands with plain or antimicrobial soap and water.

Hand cleansing. Action of performing hand hygiene for the purpose of physically or mechanically removing dirt, organic material, and/or microorganisms.

Hand disinfection is extensively used as a term in some parts of the world and can refer to antiseptic handwash, antiseptic handrubbing, hand antisepsis/decontamination/degerming, handwashing with an antimicrobial soap and water, hygienic hand antisepsis, or hygienic handrub. Since disinfection refers normally to the decontamination of inanimate surfaces and objects, this term is not used in these Guidelines.

Hygienic hand antisepsis. Treatment of hands with either an antiseptic handrub or antiseptic handwash to reduce the transient microbial flora without necessarily affecting the resident skin flora.

Surgical hand antisepsis/surgical hand preparation/presurgical hand preparation. Antiseptic handwash or antiseptic handrub performed preoperatively by the surgical team to eliminate transient flora and reduce resident skin flora. Such antiseptics often have persistent antimicrobial activity.

Surgical handscrub(bing)/presurgical scrub refer to surgical hand preparation with antimicrobial soap and water.
**Surgical handrub(bing)** refers to surgical hand preparation with a waterless, alcohol-based handrub.

**Associated terms**

**Cumulative effect.** Increasing antimicrobial effect with repeated applications of a given antiseptic.

**Health-care area.** Concept related to the “geographical” visualization of key moments for hand hygiene. It contains all surfaces in the health-care setting outside the patient zone of patient X, i.e. other patients and their patient zones and the health-care facility environment.

**Medical gloves.** Disposable gloves used during medical procedures; they include examination (sterile or non-sterile) gloves, surgical gloves, and medical gloves for handling chemotherapy agents (chemotherapy gloves).

**Patient zone.** Concept related to the “geographical” visualization of key moments for hand hygiene. It contains the patient X and his/her immediate surroundings. This typically includes the intact skin of the patient and all inanimate surfaces that are touched by or in direct physical contact with the patient such as the bed rails, bedside table, bed linen, infusion tubing and other medical equipment. It further contains surfaces frequently touched by HCWs while caring for the patient such as monitors, knobs and buttons, and other “high frequency” touch surfaces.

**Persistent activity.** The prolonged or extended antimicrobial activity that prevents the growth or survival of microorganisms after application of a given antiseptic; also called “residual”, “sustained” or “remnant” activity. Both substantive and nonsubstantive active ingredients can show a persistent effect significantly inhibiting the growth of microorganisms after application.

**Point of care.** The place where three elements come together: the patient, the HCW, and care or treatment involving contact with the patient or his/her surroundings (within the patient zone). The concept embraces the need to perform hand hygiene at recommended moments exactly where care delivery takes place. This requires that a hand hygiene product (e.g. alcohol-based handrub, if available) be easily accessible and as close as possible – within arm’s reach of where patient care or treatment is taking place. Point-of-care products should be accessible without having to leave the patient zone.

**Resident flora (resident microbiota).** Microorganisms residing under the superficial cells of the *stratum corneum* and also found on the surface of the skin.

**Transient flora (transient microbiota).** Microorganisms that colonize the superficial layers of the skin and are more amenable to removal by routine handwashing.

**Visibly soiled hands.** Hands on which dirt or body fluids are readily visible.
5.2 Glossary of Terms/ Abbreviations

(C. diff) Clostridium difficile
(HCAI) Health Care Associated Infection
(HCW) Healthcare Workers
(IP&CT) Infection Prevention & Control Team
(SARI) Strategy for Antimicrobial Resistance Ireland
(WHO) World Health Organisation

6.0 ROLES AND RESPONSIBILITIES

This guideline offers advice to healthcare workers on hand hygiene practices. Prevention and control of infection is part of total patient care. All healthcare workers who are in direct contact with patients have a responsibility to observe the precautions outlined in this guideline, and therefore prevent the transmission of infection.

All Healthcare Workers should:

- Familiarise themselves with the recommended hand hygiene technique
- Incorporate these guidelines into their practice
- Report defects in hand hygiene facilities to their manager

The person in charge of a ward or department (i.e. the Clinical Nurse Manager, Senior staff including nurse managers, Department Heads, consultants and managers of allied health care professional groups and domestic, technical services and catering staff) should:

- Actively promote the importance of hand hygiene, to ensure compliance.
- Assess their clinical areas with respect to hand hygiene facilities
- Ensure that there are an adequate number of dedicated clinical hand wash sinks with hands free or elbow controlled taps.
- Sinks should not have an overflow or plug.
- Sinks should be regularly cleaned.
- Ensure that there is a liquid soap dispenser, hand towel dispenser and a liquid soap dispenser; all wall mounted at each clinical hand washing facility.
- Report problems with providing hand hygiene facilities to their line-manager.
- Ensure that posters and other education materials are available within their department.
- Any building work or other development (including changes in the use of existing wards, units and clinical areas), must consider how adequate hand hygiene facilities are provided. Consultation with the Infection Prevention and Control Team is essential.

Corporate responsibility for the implementation of this guideline lies with the General Manager and HSE. Department Heads must ensure that Healthcare Staff members who report to them adhere to this guideline (SARI, 2004). Each individual has an obligation to adhere to these recommendations and comply with best practice.
7.0 GUIDELINE

Handwashing in the Healthcare setting has been promoted for generations and is recognised as the single most important procedure for preventing infection.

Hand Hygiene is now recognised as an integral part of quality patient care, and is included in the standards for hospital accreditation. This guideline on hand hygiene has been adapted from the Strategy for the control of Antimicrobial Resistance in Ireland (SARI) Infection Control Working Group Hand Hygiene Guideline (SARI, 2004) and WHO Guidelines on Hand Hygiene in Health Care, First Global Patient Safety Challenge, Clean Care is Safer Care (2009).

There is evidence that antiseptic handwashing / hand hygiene reduces the rate of healthcare associated infection, and that increased frequency of handwashing / hand hygiene among HCWs has been associated with decreased transmission of nosocomial pathogens.

It is important to emphasise that this guideline can only offer protection if used consistently and appropriately and that this guideline is not exhaustive.

7.1 Hand Hygiene Opportunities (5 Moments for Hand Hygiene)

"My 5 Moments for Hand Hygiene“ approach is a key approach to protect the patient, the health-care worker and the health-care environment against the spread of pathogens and thus reduce HCAI.

This approach encourages health-care workers to clean their hands:

**Moment 1: before touching a patient**
**WHEN?** Clean your hands before touching a patient when approaching him or her  
**WHY?** To protect the patient against harmful germs carried on your hands

Hand hygiene at this moment will mainly prevent colonisation of the patient with health care-associated microorganisms, resulting from the transfer of organisms from the environment to the patient through unclean hands, and exogenous infections in some cases. A clear example would be the temporal period between touching the door handle and shaking the patient’s hand: the door handle belongs to the health-care area outside the patient zone, and the patient’s hand belongs to the patient zone. Therefore hand hygiene must take place after touching the door handle and before shaking the patient’s hand. If any objects are touched within the patient zone after opening the door handle, hand hygiene might take place either before or after touching these objects, because the necessity for hand hygiene before touching objects within the patient zone is not supported by evidence; in this case the important point is that hand hygiene must take place before touching the patient.

**Moment 2: before clean/aseptic procedures**
**WHEN?** Clean your hands immediately before any aseptic task  
**WHY?** To protect the patient against harmful germs, including the patient’s own germs, entering his or her body
Once within the patient zone, very frequently after a hand exposure to the patient’s intact skin, clothes or other objects, the HCW may engage in a clean/aseptic procedure on a critical site with infectious risk for the patient, such as opening a venous access line, giving an injection, or performing wound care. Importantly, hand hygiene required at this moment aims at preventing HCAI. In line with the predominantly endogenous origin of these infections, hand hygiene is taking place between the last exposure to a surface, even within the patient zone and immediately before access to a critical site with infectious risk for the patient or a critical site with combined infectious risk. This is important because HCWs customarily touch another surface within the patient zone before contact with a critical site with infectious risk for the patient or a critical site with combined infectious risk.

For some tasks on clean sites (lumbar puncture, surgical procedures, tracheal suctioning, etc.), the use of gloves is standard procedure. In this case, hand hygiene is required before donning gloves because gloves alone may not entirely prevent contamination.

**Moment 3: after body fluid exposure/risk**

**WHEN?** Clean your hands immediately after an exposure risk to body fluids (and after glove removal)

**WHY?** To protect yourself and the health-care environment from harmful patient germs.

After a care task associated with a risk to expose hands to body fluids, e.g. after accessing a critical site with body fluid exposure risk or a critical site with combined infectious risk (body fluid site), hand hygiene is required instantly and must take place before any next hand-to-surface exposure, even within the same patient zone. This hand hygiene action has a double objective. First and most importantly, it reduces the risk of colonisation or infection of HCWs with infectious agents that may occur even without visible soiling. Second, it reduces the risk of a transmission of microorganisms from a “colonized” to a “clean” body site within the same patient. This routine moment for hand hygiene concerns all care actions associated with a risk of body fluid exposure and is not identical to the –hopefully very rare – case of accidental visible soiling calling for immediate handwashing.

Disposable gloves are meant to be used as a “second skin” to prevent exposure of hands to body fluids. However, hands are not sufficiently protected by gloves, and hand hygiene is hands strongly recommended after glove removal. Hence, to comply with the hand hygiene indication in Moment 3, gloves must be removed and subsequently cleansed.

**Moment 4: after touching a patient**

**WHEN?** Clean your hands after touching a patient and his or her immediate surroundings when leaving

**WHY?** To protect yourself and the health-care environment from harmful patient germs.

When leaving the patient zone after a care sequence, before touching an object in the area outside the patient zone and before a subsequent hand exposure to any surface in the health-care area, hand hygiene minimises the risk of dissemination to the health-care environment, substantially reduces contamination of HCWs’ hands with the flora from patient X, and protects the HCWs themselves.
Moment 5: after touching patient surroundings  
WHEN? Clean your hands after touching any object or furniture in the patient’s immediate surroundings, when leaving - even without touching the patient  
WHY? To protect yourself and the health-care environment from harmful patient germs

The fifth moment for hand hygiene is a variant of Moment 4: it occurs after hand exposure to any surface in the patient zone, and before a subsequent hand exposure to any surface in the health-care area, but without touching the patient. This typically extends to objects contaminated by the patient flora that are extracted from the patient zone to be decontaminated or discarded. Because hand exposure to patient objects, but without physical contact with the patients, is associated with hand contamination, hand hygiene is still required.

Reminders in the workplace are key tools to prompt and remind health-care workers about the importance of hand hygiene and about the appropriate indications and procedures for performing it. They are also means of informing patients and their visitors of the standard of care that they should expect from their health-care workers with respect to hand hygiene.

Posters are the most common type of reminder. The Infection Prevention & Control poster selection includes a WHO-branded standard poster to visualise the “My 5 Moments for Hand Hygiene” approach and the correct procedure to perform handrubbing and handwashing.

Refer to Appendix I

7.2 Different Levels of Hand Hygiene:

There are three recommended levels of hand hygiene to ensure that the hand hygiene performed is suitable for the task being undertaken. The efficacy of hand hygiene will depend on application of an adequate volume of a suitable hand hygiene agent with good technique for the correct duration of time, and finally ensuring that hands are dried properly. (Appendix 2, 3 & 4).

7.2.1 Social Hand hygiene:

The aim of social hand hygiene with soap and water is to remove dirt and organic material including dead skin and most transient micro-organisms. Social hand hygiene involves washing hands for at least 15 seconds. On visibly clean hands social hand hygiene can be undertaken using an alcohol hand gel/rub product.

Hands should be washed:  
- When hands are visibly contaminated with dirt, soil or organic material.  
- At the beginning and the end of the work shift  
- Before and after each patient contact
- After removing gloves
- After moving from a contaminated area to a clean area during care of an individual patient
- After handling soiled equipment, materials or environment
- Before preparing or handling food
- After personal bodily functions, i.e. blowing nose or using toilet facilities

Refer to (Appendix II, III, IV).

### 7.2.2 Antiseptic Hand Hygiene

The aim of antiseptic hand hygiene is to remove all transient micro-organisms, to achieve a higher level of cleanliness than social hand washing.

Antiseptic Hand Hygiene using an Antiseptic Hand Wash or Alcohol Hand Gel / Rub on visibly clean hands should be practiced:

- Before and after each patient contact in critical care units, immuno-compromised patients, or those with large wounds, patients with burns and also before entering units/wards with such patients
- After all contact with patients where transmission based precautions are used, and prior to leaving isolation rooms/wards with such patients.
- When hands are contaminated with a heavy microbial load, such as foul or infectious material.
- Before performing invasive procedures as part of aseptic technique.

Refer to (Appendix II, III, IV).
7.2.3 Surgical Hand hygiene

Surgical hand antisepsis should be performed prior to all surgical procedures. The aim is to remove all transient flora and substantially reduce resident flora. The antiseptic agent used must provide broad-spectrum microbial activity, act rapidly and persist on the skin over several hours, and ideally provide a cumulative effect after repeated use. The agent used should be non-toxic, and non-irritating, thereby facilitating good skin condition and therefore good compliance with the surgical hand scrub.

Surgical Hand antisepsis involves thorough washing and disinfection of hands, subungual areas and forearms.

- Hand jewellery including wedding bands should be removed.
- Remove debris from beneath nails using a sterile single use or autoclavable nail cleaner.
- There should be no nail-bed injuries or inflammatory processes

- Refer to Appendix V for Surgical Hand Scrub technique using a conventional antiseptic hand scrub agent (AORN 1999).
7.3 Alcohol Hand gels/rubs

Alcohol based products with added emollients are very effective anti-microbial agents when applied correctly to the hands. They are highly effective for social and antiseptic hand hygiene in all patient areas; however, they must only be used on visibly clean hands, for a minimum of 30 seconds (Sterillium). As alcohol is not a cleansing agent, its use is not recommended for use in the presence of visible dirt.

Alcohol hand rub products with added emollients reduce the risk of dermatological side effects. Repeated use of alcohol-based products with added emollients may result in excessive build up of emollient on the hands, and can be reduced by periodic social hand washing with soap and water.

Alcohol hand rubs are recommended for use by the public in critical care areas, in isolation facilities and during outbreak situations. Alcohol Hand gels/rubs should be applied to the entire skin surface using a prescribed technique and allowed to dry completely (SARI 2004). Refer to Appendix VI.

Note: There are some situations where alcohol handrub is ineffective such as the diarrhoeal disease Clostridium difficile. In these settings: WASH YOUR HANDS.

Refer to (Appendix VI).

7.4 Artificial nails and nail polish

Bacteria may be harboured in the subungual areas of the hands in high concentrations, and chipped nail varnish and artificial nails support the growth of microbes on finger nails.

Nails should be kept short. Nail varnish and/or artificial nails/gel nails should not be worn by staff working in health care settings.

7.5 Jewellery

The wearing of rings with ridges and stones should be avoided in health care settings, and have been identified as a cause of persistent bacterial contamination of the hands, particularly with Staphylococcus and Gram negative bacilli. All rings should be removed in order to facilitate proper hand hygiene, with the exception of a plain wedding band. When performing hand hygiene technique move the wedding band to wash underneath. Rings also make the donning of gloves difficult, as gloves may tear. Health and safety issues are a concern as stoned rings may tear a patient’s skin during care giving.

All rings including wedding bands must be removed when performing pre-operative hand hygiene.

Wrist jewellery is not recommended in the clinical setting and must also be removed prior to performing hand hygiene, to allow access to the wrist area when performing social or antiseptic hand hygiene.
7.6 Prevention of skin damage resulting from hand hygiene

- Dry hand thoroughly using a patting motion rather that rubbing, to reduce friction of the skin.
- Avoid prolonged use of gloves, and the use of gloves when not required.
- Wash hands after removing gloves.
- Seek help and advice form the Occupational Health Team, for expert advice if dermatological problems occur.
- Moisturising hand cream (recommended Infection Control hand cream) should be used to increase skin hydration and replace depleted lipids, to reduce the risk of developing contact dermatitis.
- Tubes of hand cream are associated with outbreaks of infection, and should be avoided in clinical areas.
- Good quality disposable hand towels are recommended.
- Damaged areas of the skin are prone to colonisation with micro organisms (e.g. MRSA), therefore the appropriate management of all forms of dermatitis is essential for each health care worker and the patients that they care for.

7.7 Facilities

- Waste bins must be hands free and ideally should be quiet closing, especially in critical care areas.
- Hand washing sinks should be available in clinical areas and should be independent of patients and/or en-suite facilities.
- Ideally hand-washing sinks should be located in a position close to exit doors of isolation rooms, wards & units.
- Clinical institutions should aspire to having at least one hand-washing sink per 4-6 beds in general open wards and a minimum of one sink per 1-3 beds in critical care areas.
- Hand washing sinks should be positioned to ensure that there is adequate space for the operation of taps and the installation of hand hygiene products and paper hand towel dispensers.
- All hand washing sinks should be centrally located and free from obstruction.
- Taps should be hands free, and mixer type.
- Liquid Hand hygiene Dispensers should be wall mounted and either elbow or wrist operated.
- A new pump dispenser should be used with each new container of liquid hand hygiene solutions.
- Good quality disposable hand towels are recommended.
- Liquid hand hygiene agents should be stored in closed containers and must **never** be topped up, (SARI 2004).
- Hand washing preparations are easily contaminated and may support the growth of micro organisms.
- The involvement of the Infection Control Team is essential at early stages of planning and projects.

7.8 **Education**

All healthcare workers who work in the clinical environment **must** be educated in hand hygiene theory and practice prior to commencing work. All staff must attend the Infection Control induction programme and attendance should be mandatory. The Infection Control Team recommends that annual updates are attended by all healthcare workers. Senior clinical staff must act as role models in the implementation of the hand hygiene guideline and recommendations from Infection Control personnel.

8.0 **IMPLEMENTATION PLAN**

8.1 This guideline will be implemented by Heads of Disciplines, Nursing Support Service Management, General Services Management, Heads of Departments and the Infection Prevention & Control Team in the Mid-Western Regional Hospitals.

8.2 The Heads of Disciplines and Heads of Departments are responsible to ensure that this guideline is available/brought to the attention to staff who report to them in their areas of responsibility.

8.3 Staff have a responsibility to read this guideline and sign the Signature Sheet (Refer to Appendices).

8.4 The Infection Prevention and Control Team will provide education and training sessions to relevant staff as part of the implementation process of this guideline.

8.5 The receipt sheet should be returned to the infection Prevention and Control secretary.

8.6 The Infection Prevention & Control team will be responsible for maintaining guideline receipt sheets from all Wards/Departments. It is the responsibility of Heads of Disciplines and Heads of Departments to maintain records locally.
9.0 REVISION AND AUDIT

9.1 The Guideline will be reviewed by the Infection Prevention and Control Team and updated as necessary and at least every 2 years.

9.2 An audit will be undertaken within one year of issue.
10.0 REFERENCES/ BIBLIOGRAPHY


Northern Ireland Department of Health Hand Hygiene (Available at http://www. www.infectioncontrolmanual.co.ni


The National Patient Safety Agency Clean your hands campaign (Available at http://www.npsa.nhs.uk/cleanyourhands/the-campaign/)


World Health Organization (2009) WHO Guidelines on Hand Hygiene in Health Care, First Global Patient Safety Challenge, Clean Care is Safer Care

Http://www.who.int/gpsc/en/
11.0 APPENDICES

Appendix I WHO 5 moments of Hand Hygiene Poster, available in all clinical areas in MWRHs

Your 5 moments for HAND HYGIENE

1. BEFORE PATIENT CONTACT
   WHEN: Clean your hands before touching a patient when approaching him or her
   WHY: To protect the patient against harmful germs carried on your hands

2. BEFORE ASEPTIC TASK
   WHEN: Clean your hands immediately before any aseptic task
   WHY: To protect the patient against harmful germs, including the patient's own germs, entering his or her body

3. AFTER BODY FLUID EXPOSURE RISK
   WHEN: Clean your hands immediately after an exposure risk to body fluids
   WHY: To protect yourself and the health-care environment from harmful patient germs

4. AFTER PATIENT CONTACT
   WHEN: Clean your hands after touching a patient and his or her immediate surroundings
   WHY: To protect yourself and the health-care environment from harmful patient germs

5. AFTER CONTACT WITH PATIENT SURROUNDINGS
   WHEN: Clean your hands after touching any object or furniture in the patient's immediate surroundings
   WHY: To protect yourself and the health-care environment from harmful patient germs

World Health Organization

WHO acknowledge the Hôpitaux Universitaires de Genève (HUG), in particular the members of the Infection Control Programme, for their active participation in developing this material.

HSE West Mid-Western Regional Hospitals, Hand Hygiene Guideline, MGIP&C 09/10, Revision 03, 09/12
## Appendix II Levels of Hand Hygiene (SARI 2004)

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<tr>
<th></th>
<th>Social hand wash</th>
<th>Antiseptic hand hygiene wash/rub</th>
<th>Surgical hand hygiene Scrub</th>
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<tr>
<td><strong>Rationale</strong></td>
<td>• To attain socially clean hands.</td>
<td>• To achieve a higher level of cleanliness than that achieved during social hand washing.</td>
<td>• To remove all transient micro organisms.</td>
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<td></td>
<td>• To remove dead skin cells and most transient micro organisms</td>
<td>• To remove all transient micro organisms.</td>
<td>To obtain a substantial reduction in resident micro organisms.</td>
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<td><strong>Hand Hygiene Agent</strong></td>
<td>• Good quality liquid soap and warm water.</td>
<td>• Antiseptic solutions such as Chlorhexidine.</td>
<td>Suitable antiseptic soaps such as: Chlorhexidine or Providine Iodine based soaps x 2 – 6 minutes.</td>
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<td>• Alcohol hand rub products on visibly clean hands.</td>
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<td><strong>Duration</strong></td>
<td>• At least 15 seconds.</td>
<td>• At least 15 seconds.</td>
<td>• Antiseptic soap x 2 – 6 min</td>
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<td><strong>Indication</strong></td>
<td>Before:</td>
<td>Before:</td>
<td>Before:</td>
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<td>• Commencing work.</td>
<td>• Any non-surgical procedure that requires aseptic technique.</td>
<td>• Any invasive surgical procedure.</td>
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<td>• Eating</td>
<td>• Entering isolation rooms.</td>
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<td>• Handling food</td>
<td>• Entering critical care areas.</td>
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<td>• Each patient contact</td>
<td>• After:</td>
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<td></td>
<td>• Emptying drainage bags, giving injections etc.</td>
<td>• Removing gloves</td>
<td>• Leaving isolation rooms.</td>
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<td></td>
<td>• Handling soiled equipment and materials</td>
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<td>• Removing gloves</td>
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<td><strong>Technique</strong></td>
<td>• Remove jewellery</td>
<td>• Same as for social hand hygiene technique</td>
<td><strong>See Appendix 4</strong></td>
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<td>• Turn on taps</td>
<td>• (See Appendix 2 &amp; 3)</td>
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<td></td>
<td>• Wet hands</td>
<td>• (See Appendix 2 &amp; 3)</td>
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<td>• Apply 5mls of soap to hands</td>
<td>• Same as for social hand hygiene technique</td>
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<td>• Wash using method as outlined in <strong>Appendix 2 &amp; 3</strong></td>
<td>• (See Appendix 2 &amp; 3)</td>
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<td>• Rinse well</td>
<td>• Same as for social hand hygiene technique</td>
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<td>• Turn off tap using hands free method or paper towel</td>
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<td>• Pat dry well with disposable paper towels</td>
<td>• Same as for social hand hygiene technique</td>
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<td>• Discard paper towel into waste bin – (open bin by foot pedal only)</td>
<td>• Same as for social hand hygiene technique</td>
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<td><strong>Do not touch taps with clean hands</strong></td>
<td>• Same as for social hand hygiene technique</td>
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Appendix III Handwashing Technique

PREPARATION:
1. Remove hand and wrist jewellery (wedding band allowed) N.B. Keep nails short.
2. Wet hands thoroughly under running water
3. Apply 5mls of soap / antiseptic soap to cupped hand by pressing dispenser with heel of hand (do not use finger tips on the dispenser)

HANDWASHING: - process takes at least 15 seconds
1. Wet hands and rub palm to palm 5 times
2. Rub right palm over the back of left hand up to wrist level 5 times. Do the same with the other hand.
3. With right hand over back of left hand rub fingers 5 times. Do same with the other hand.
4. Rub palms to palm with the fingers in inter-faced.
5. Wash thumbs of each hand separately using a rotating movement.
6. Rub the tips of the fingers against the opposite palm using a circular motion. Also ensure nail beds are washed.
7. Rinse hands thoroughly under running water to remove all traces of soap.
8. Turn off taps using elbows.
10. Discard paper towel in waste bin. Open bin using foot pedal only to avoid contaminating clean hands.
Appendix IV Hand Hygiene Poster demonstrating hand hygiene technique
(Available in all Clinical areas-MWRHs)

Handwashing Technique

Preparation

1. Remove hand and wrist jewellery (wedding band allowed N.B. keep nails short)
2. Wet hands thoroughly under warm running water
3. Apply 5ml of soap and/or alcohol-based hand rub
   (do not use finger tips on the dispenser)

Handwashing - (process takes at least 15 seconds)

A. Rub palm to palm 5 times
B. Rub fingers over the back of left hand up to wrist level 5 times.
   Do the same with the other hand
C. With right hand over back of left hand rub fingers 5 times.
   Do same with the other hand
D. Rub palm to palm with the fingers interlaced
E. Wash thumbs of each hand separately using a rotating movement
F. Rub the tips of the fingers against the opposite palm using a circular motion. Also ensure nail beds are washed
G. Rinse hands thoroughly under running water to remove all traces of soap
H. Turn off taps using elbows

I. Dry hands completely using a disposable paper towel
J. Discard paper towel in waste bin,
   Open bin using feet pedantically to avoid contaminating clean hands

Clean your hands
Say no to infection

HSE West Mid-Western Regional Hospitals, Hand Hygiene Guideline, MGIP&C 09/10, Revision 03, 09/12
Appendix V Surgical Hand Scrub technique using a conventional antiseptic hand scrub agent (AORN 1999)

**Step 1:** Perform a short pre-scrub wash of the hands and forearms, with non antimicrobial soap to loosen surface debris and remove transient organisms.

**Step 2:** Clean subungual areas under running water using single use sterile nail cleaner.

**Step 3:** Apply the antimicrobial agent to the hands and forearms rubbing thoroughly. Visualise the fingers, hands and arms as having four sides each of which must be scrubbed effectively. The volume of the antiseptic agent used and the duration of the scrub (usually 2–6 minutes) should be in accordance with manufacturers recommendations.

Hold hands higher than the elbow and away from surgical attire. Care should be taken to avoid splashing the surgical attire or gowns.

**Step 4:** Rinse hands and forearms thoroughly, commencing at the hands and working down to the elbow. Dry hands and arms well with a sterile disposable towel, using a patting motion rather than rubbing.
Appendix VI Poster demonstrating Alcohol Gel technique (Available in all Clinical areas MWHRs)

Face the pump to the side and pump the Sterillium Gel out of the dispenser into the cupped palm of a dry hand. Moisture or water on damp hands or wet hands results in dilution of the Sterillium Gel and a reduction of effect.

Rub at least 3 mls Sterillium Gel into the dry hands for a period of 30 seconds using the 6 step method below. Carry out the movement of each step 5 times paying particular attention to the thumbs, finger tips and areas between the fingers.

Ensure that the hands remain moist throughout the rub-in time. If necessary, add more hand Sterillium Gel.

Step 1:
Palm to Palm. Attention: Including wrists. 5 times.

Step 2:
Palm of right hand over back of left hand and palm of left hand over back of right hand. 5 times.

Step 3:
Palm to palm with fingers interlaced. 5 times.

Step 4:
Back of fingers to opposing palms with fingers interlocked. 5 times.

Step 5:
Rotational rubbing of right thumb clasped in left palm and vice versa. 5 times.

Step 6:
Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa. 5 times.

The top of the Sterillium Gel pump must be 137 cms from the ground.
### Appendix VII Signature Sheet

**Signature Sheet:**
I have read, understand and agree to adhere to the attached Guideline

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HSE West Mid-Western Regional Hospitals, Hand Hygiene Guideline, MGIP&C 09/10, Revision 03, 09/12
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