

SOP 1 Hand Hygiene

Healthcare associated infections (HCAs) are infections that are acquired following contact with the healthcare system. Hand hygiene is one of the most effective means of preventing HCAs.

1.1 For staff to be competent in appropriate hand hygiene there is a requirement to receive mandatory hand hygiene education and training on induction and every two years thereafter.

Access link for HSE Land training:

[Hand Hygiene for HSE Clinical and non-clinical Staff](#)

1.2 Dental facilities should have the following in place to support effective hand hygiene:

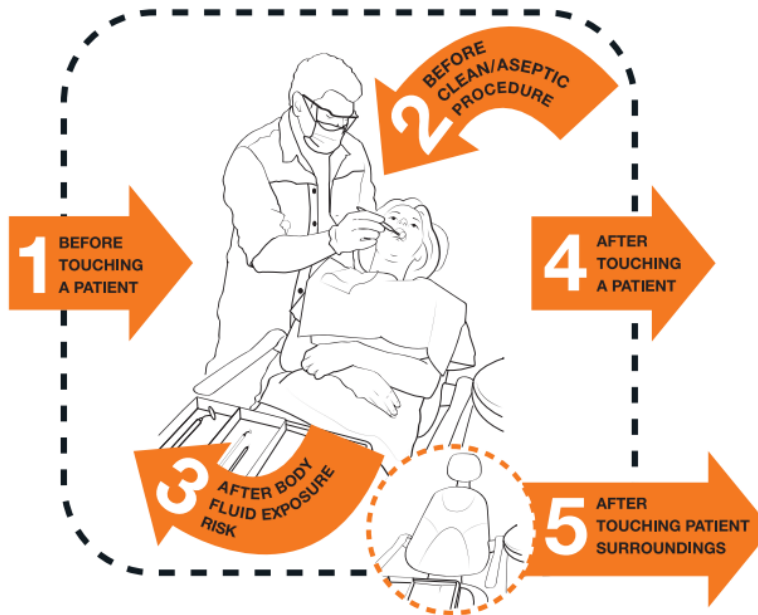
- Dedicated hand wash basins with soap dispenser, paper towel and a foot operated non healthcare risk waste bin
- Access to HSE approved alcohol based hand rubs (ABHRs) at the point of care
- HSE Hand wash/alcohol hand rub signage displaying the approved hand hygiene technique
- Access to HSE approved hand creams/moisturisers. Staff should regularly use hand moisturising agents to reduce irritation and maintain the integrity of the skin.

1.3 Staff are required to be in compliance with the National Hand Hygiene Guidelines which include:

- Bare below the elbow (e.g. short sleeved top or rolled up sleeves at least 10cm above the wrist)
- Remove all wrist jewellery, including wristwatch/electronic devices
- Remove all hand jewellery (a single plain band (no stones) may be worn)
- Keep fingernails short (e.g. tips less than 0.5cm)
- Do not wear false nails or nail enhancements (e.g. gel nails, acrylic nails, nail hardener)
- Do not wear nail varnish of any kind (including nail hardener)
- Cover cuts and abrasions with a waterproof dressing

<https://www.hse.ie/eng/about/who/qid/nationalsafetyprogrammes/hcaiamr/2015updateguidelinesforhandhygiene.pdf>

1.4 Perform Hand Hygiene using an ABHR or soap and water using an appropriate technique (e.g. WHO) in line with the WHO 5 Moments for Hand Hygiene.



1. Before touching a patient	<p>When: Clean your hands before touching a patient</p> <p>Why: To protect the patient against harmful germs carried on your hands</p>
2. Before clean/aseptic procedure	<p>When: Clean your hands immediately before performing a clean/aseptic procedure</p> <p>Why: To protect the patient from harmful germs (including the patient's own) from entering his/her body.</p>
3. After body fluid exposure risk	<p>When: Clean your hands immediately after a procedure involving exposure risk to body fluids (after glove removal)</p> <p>Why: To protect yourself and the environment from harmful patient germs</p>
4. After touching a patient	<p>When: Clean your hands after touching a patient at the end of the encounter or when the encounter is interrupted</p> <p>Why: To protect yourself and the environment from harmful patient germs</p>
5. After touching patient surroundings	<p>When: Clean your hands after touching any object or furniture in the patient's surroundings when a specific zone is temporarily and exclusively dedicated to a patient – even if the patient has not been touched.</p> <p>Why: To protect yourself and the environment from harmful patient germs</p>

Table 4: World Health Organisation - 5 Moments for Hand Hygiene.

1.5 Additional situations when hand hygiene should be performed:

- At the start and end of the working day
- After using the toilet
- Before preparing medication
- Before preparing or eating food
- When visibly dirty or soiled with blood or body fluids e.g. coughing

1.6 Hand Hygiene Technique

Hand hygiene can be carried out in three ways:

- *Use of alcohol based hand rubs (ABHR) foam/gel*
- *Wash with plain liquid soap and water followed by patting dry with single use towels*
- *Wash with antiseptic hand wash and water followed by patting dry with single use towels*

Best practice is for dental staff to use ABHR between patient appointments and during interruptions within the appointment. ABHR can be used as frequently as necessary. Alcohol based hand rub gel/foams are the preferred method for hand hygiene when the hands are not soiled and are physically clean. A moisturiser (compatible with glove wearing) should be applied up to four times a day.

There are 2 situations where alcohol hand rub is not sufficient:

- *After contact with a patient known/suspected to be infectious with C. Diff or Norovirus.*
- *Where hands are visibly soiled.*

In these instances, wash hands with antiseptic soap or plain soap and water

Use Hand Rub/Gels/Foam:

Hand rubs are very effective antimicrobial agents. They should be applied to hands for a minimum of 15 seconds (20-30 seconds WHO), using an adequate volume to completely wet the hands.

ABHR

Alcohol based products containing 70% (60-75%) alcohol and an emollient are kinder to the skin than soaps or antimicrobial antiseptics. Repeated use of an alcohol hand rub can lead to an excessive build up emollient on the hands; this should be removed by periodic washing with soap and water.

Use of emollient hand cream/moisturiser:

A HSE approved emollient hand cream/moisturiser should be applied regularly, such as after performing hand hygiene before a break or finishing work, but not applied before donning gloves. Hand hygiene technique may need to be reviewed if skin irritation occurs. If irritation persists, occupational health should be consulted for advice.

Alcohol Based Hand Rub Technique

- Effective decontamination of the hands using alcohol hand rub involves a series of steps and should take at least 15 seconds. WHO recommends 20-30 seconds for entire procedure.
- Hands should be free of dirt and organic material (alcohol is ineffective in the presence of dirt).
- Dispense, as per manufacturer's instructions, the required volume of alcohol-based rub/gel into the palm of the hands to adequately cover hands.
- Use the WHO technique – listed below.
- Each step is repeated to ensure the alcohol-based rub/gel will come into contact with all surfaces of the hands and wrist without the product drying out.

Steps to be followed or procedure or sequence to be followed when applying ABHR;

1. Apply a palmful of the product in a cupped hand covering all 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. Back of fingers to opposing palm with fingers interlocked.
6. Rotational rubbing of left thumb clasped in right palm and vice versa.
7. Rotational rubbing backwards and forwards with clasped fingers of right hand in left palm and vice versa.
8. Once dry your hands are safe.
 - Refer to Alcohol Based Hand Rub Technique poster – Appendix V.

Hand Washing Technique

- Effective hand washing technique involves a sequence of events and should take at least 15 seconds: WHO recommends 40-60 seconds for entire procedure
- Wet hands and wrists under running water.
- Dispense liquid soap (enough to form lather) into a cupped hand.
- The hand wash solution must come into contact with all surfaces of the hands using the WHO 6 step technique – listed below.
- Each step includes 5 repeats of the movement.

Steps to be followed or procedure or sequence to be followed when carrying out handwashing;

1. Wet hand with water
2. Apply enough soap to cover all hand surfaces.
3. Rub hands palm to palm.
4. Right palm over left dorsum with interlaced fingers and vice versa.
5. Palm to palm with fingers interlaced.
6. Backs of fingers to opposing palms with fingers interlocked.
7. Rotational rubbing of left thumb clasped in right palm and vice versa.
8. Rotational rubbing backwards and forwards with clasped fingers of right hand in left palm and vice versa.
9. Rinse hands with water.
10. Dry hand thoroughly with single use towel.
11. Use towel to turn off tap.
12. Your hands are now safe.
 - Refer to WHO Hand Washing Technique poster – Appendix VI.


Click link below to access HPSC 'Guidance for hand hygiene in Irish healthcare settings 2015'

[Guidance for hand hygiene in Irish healthcare settings 2015](#)

Appendix V Alcohol Based Hand Rub Technique

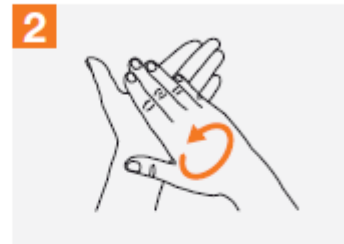
How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

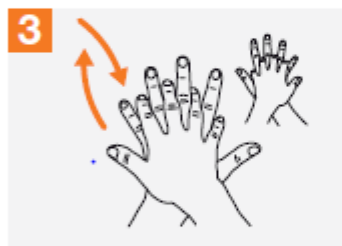
 Duration of the entire procedure: 20-30 seconds



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;



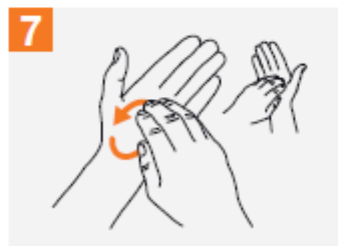
Palm to palm with fingers interlaced;



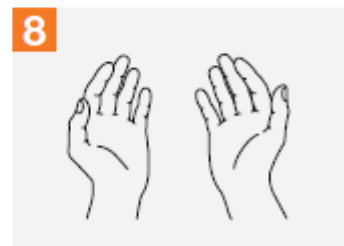
Backs of fingers to opposing palms with fingers interlocked;



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.



World Health Organization

Patient Safety


A World Alliance for Safer Health Care

SAVE LIVES
Clean Your Hands

Appendix VI Hand Washing Technique Poster

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;



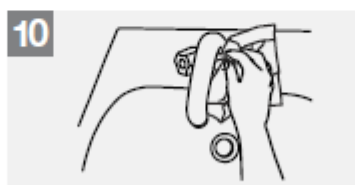
7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



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.

Guidelines for hand hygiene in Irish healthcare settings - Update of 2005 guidelines (January 2015)

Royal College of Physicians of Ireland/HSE 2015