



HAND HYGIENE

GUIDELINE

Department: Quality Improvement

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GUIDELINE – HAND HYGIENE

INTRODUCTION

Hand Hygiene is the single most effective means of preventing and reducing the spread of infection by decreasing the number of transient and resident organisms on the hands. Hand hygiene is an essential practice for all healthcare workers and those attending or visiting healthcare facilities. Evidence has consistently shown that hand hygiene practices have been poorly conducted by healthcare workers.

The World Health Organization (WHO) has developed an approach to hand hygiene for healthcare workers known as the 'Five Moments in Hand Hygiene' that is now recognized as the basis for good hand hygiene practice in healthcare facilities to prevent and reduce the spread of infection. This guideline reiterates the WHO approach to hand hygiene and promotes its adoption by all healthcare operators licensed under DHCA and its branches.

1. PURPOSE

1.1	To provide minimum standards and procedures in hand hygiene practices by healthcare workers in outpatient clinics and other clinical support and medical facilities licensed in Dubai Healthcare City Authority (DHCA).
1.2	This guideline does not include standards for surgical scrub procedures in surgical facilities.

2. SCOPE OF APPLICATION

2.1	This guideline has been developed to assist healthcare operators implement best practices in infection control and prevention and may be adopted by licensed healthcare operators in DHCC as part of their internal policies and procedures.
2.2	Hand hygiene is a general term that refers to any form/technique of hand cleansing and includes washing hands with water and liquid soap or applying a waterless or alcohol-based antimicrobial solution. It should be noted that the use of gloves does not replace the need for suitable hand hygiene.

3. APPLICABLE TO

3.1	This guideline is applicable to all healthcare workers, including clinical, technical, administrative, domestic, cleaning staff and contracted service workers in healthcare facilities licensed under DHCA and its branches.
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4. GUIDELINE

4.1 Hand Hygiene Techniques:

4.1.1 Before performing hand hygiene:

- 4.1.1.1 Expose forearms;
- 4.1.1.2 Remove all hand/wrist jewelry (a single, plain metal finger ring is permitted but should be removed -or moved up- during hand hygiene);
- 4.1.1.3 Ensure finger nails are clean, short and that artificial nails or nail products are not worn; and
- 4.1.1.4 Cover all cuts or abrasions with a waterproof dressing.



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4.1.2	<p>Hand wash using soap and water hand hygiene technique:</p> <p>4.1.2.1 Follow the technique that is shown in Appendix 1 (page 6). The duration of the hand wash step of rubbing hands with soap should be 15 to 20 seconds (steps 2 to 7 on Appendix 1).</p> <p>4.1.2.2 The whole process of hand washing should take 40-60 seconds.</p> <p>4.1.2.3 Wash hands when they are visibly dirty or visibly soiled with blood or body fluids and after using the toilet.</p> <p>4.1.2.4 Wash hands when exposure to potential spore forming organisms such as Clostridium difficile or a gastro-intestinal infection, e.g. norovirus is suspected or proven.</p>
4.1.3	<p>Handrub using alcohol-based formulation hand hygiene technique:</p> <p>4.1.3.1 Follow the technique that is shown in Appendix 2 (page 7).</p> <p>4.1.3.2 The duration of the hand rub procedure is 20 – 30 seconds.</p> <p>4.1.3.3 Use an alcohol-based hand rub for all clinical situations where hands are visibly clean</p> <p>4.1.3.4 Alcohol-based hand rubs must be allowed to dry and evaporate completely by rubbing hands vigorously.</p> <p>4.1.3.5 Follow the manufacturers' recommendations regarding the volume of product to use.</p> <p>4.1.3.6 Alcohol based hand rub is NOT effective against Clostridium Difficile and Norovirus, thus hands should be washed with soap and water when caring for patients known or suspected with either of these organisms.</p> <p>4.1.3.7 Soap and alcohol-based hand rub should not be used concurrently</p>

4.2 World Health Organization's 5 moments of Hand Hygiene:

The 5 Moments of Hand Hygiene describe the critical times when hand hygiene is to be performed and they are outlined below.

4.2.1	<p>Before touching a patient:</p> <p>To protect patients from harmful pathogens that may be on your hands.</p> <p>4.2.1.1 Before performing a physical non-invasive examination: taking the pulse, blood pressure, chest auscultations, and recording ECG.</p> <p>4.2.1.2 Before delivering care and other non-invasive treatment.</p> <p>4.2.1.3 Before assisting a patient in personal care activities to move, to take a bath, to eat, and to get dressed.</p>
4.2.2	<p>Before clean /aseptic procedure:</p> <p>To protect patients from harmful pathogens that may enter his or her body (including pathogens that may be carried by the patient)</p> <p>4.2.2.1 Before inserting an invasive medical device (e.g. nasal cannula, nasogastric tube, endotracheal tube, urinary probe, percutaneous catheter) or disrupting/opening any circuit of an invasive medical device (for food, medication, draining, suctioning and monitoring purposes).</p> <p>4.2.2.2 Before taking blood specimens or giving injections.</p> <p>4.2.2.3 Before brushing the patient's teeth, instilling eye drops, performing a digital vaginal or rectal examination, examining mouth, nose, ear with or without an instrument, inserting a suppository/pessary, suctioning mucous.</p> <p>4.2.2.4 Before dressing a wound, with or without an instrument, or applying ointment.</p> <p>4.2.2.5 Before preparing food, medications, pharmaceutical products.</p>
4.2.3	<p>After body fluid exposure risk:</p> <p>To protect yourself and the health-care environment from harmful patient pathogens.</p> <p>4.2.3.1 When the contact with a mucous membrane and with non-intact skin ends.</p>



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	<p>4.2.3.2 After a percutaneous injection or puncture, after inserting an invasive medical device, (vascular access, catheter tube, drain, etc)</p> <p>4.2.3.3 After removing an invasive medical device.</p> <p>4.2.3.4 After removing any form of material offering protection (e.g. napkin, dressing, gauze, sanitary towel, etc.)</p> <p>4.2.3.5 After handling a sample containing organic matter, after cleaning excreta and any other body fluid, after cleaning any contaminated surface and soiled material (soiled bed linen, dentures, instruments, urinal, lavatories, etc.)</p>
4.2.4	<p>After touching a patient: To protect yourself and the health-care environment from harmful patient pathogens.</p> <p>4.2.4.1 After performing a physical non-invasive examination: taking pulse, blood pressure, chest auscultations, and recording ECG.</p> <p>4.2.4.2 After shaking hands, or stroking a child's forehead.</p> <p>4.2.4.3 After you have assisted the patient in personal care activities: to move, to bathe, to eat, to dress, etc.</p> <p>4.2.4.4 After delivering care and other non-invasive treatment: changing bed linen as the patient is in, applying oxygen mask, and giving a massage.</p>
4.2.5	<p>After touching patient surroundings: To protect yourself and the health-care environment from harmful patient pathogens.</p> <p>4.2.5.1 After an activity involving physical contact with the patient's immediate environment: changing bed linen with the patient out of bed, holding a bed trail, clearing a bedside table.</p> <p>4.2.5.2 After a care activity: adjusting perfusion speed, clearing a monitoring alarm</p> <p>4.2.5.3 After other contacts with surfaces or inanimate objects. Ideally try to avoid these unnecessary activities: leaning against a bed, leaning against a night table/bedside table, patient treatment couch.</p>

4.3 Glove Use related to Hand Hygiene:

4.3.1	The use of gloves does not replace the need for hand hygiene.
4.3.2	Maintain hand hygiene before and after wearing gloves.
4.3.3	Wear gloves when it can be reasonably anticipated that contact with blood or other potentially infectious materials, mucous membranes, or non-intact skin will occur.
4.3.4	After hand hygiene, let your hands dry completely before putting on gloves
4.3.5	When wearing gloves, change or remove gloves during patient care if moving from a contaminated body site to either another body site (including non-intact skin, mucous membrane or medical device) within the same patient or the environment.
4.3.6	Remove gloves after caring for a patient.
4.3.7	Do not wear the same pair of gloves for the care of more than one patient.
4.3.8	Wear gloves when you have dermatologic conditions which harbor or increase the risk of bacteria.

4.4 Education related to Hand Hygiene:

4.4.1	Education is a cornerstone for improvement with hand hygiene practices.
4.4.2	<p>Patient and staff education could include:</p> <p>4.4.2.1 Awareness of hand hygiene techniques.</p> <p>4.4.2.2 Knowledge concerning indications for hand hygiene during daily patient care.</p> <p>4.4.2.3 Plan and develop educational materials such as visual reminders, printed leaflets and brochures to promote hand hygiene practices.</p>



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4.4.2.4 Actively engage patients in their care by encouraging patient and family participation in hand hygiene practices.

4.5 Hand Care Related to Hand Hygiene:

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| 4.5.1 | Take care of your hands by regularly using a protective hand cream or lotion, at least daily. |
| 4.5.2 | Do not routinely wash hands with soap and water immediately before or after using an alcohol-based hand rub. |
| 4.5.3 | Do not use hot water to rinse hands. |

4.6 Common Do's and Don'ts

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| 4.6.1 | Please refer to Appendix 3. |
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5. Definitions

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| 5.1 | WHO: World Health Organization |
| 5.2 | DHCA: Dubai Healthcare City Authority |

6. APPENDICES

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| 6.1 | Appendix 1: How to Hand Wash |
| 6.2 | Appendix 2: How to Hand Rub |
| 6.3 | Appendix 3: Common Do's and Don'ts |

7. REFERENCE

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| 7.1 | Centers for Disease Control and Prevention (CDC), Hand Hygiene in Healthcare Settings. https://www.cdc.gov/handhygiene/index.html (Last reviewed, April 2019) |
| 7.2 | Centers for Disease Control and Prevention, Hand Hygiene Guidance. https://www.cdc.gov/handhygiene/providers/guideline.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fhandhygiene%2Fguidelines.html (Last reviewed, January 2020) |
| 7.3 | World Health Organization (WHO), How to Hand Rub Poster. https://www.who.int/gpsc/5may/How_To_HandRub_Poster.pdf?ua=1 |
| 7.4 | World Health Organization (WHO), How to Hand Wash Poster. https://www.who.int/gpsc/5may/How_To_HandWash_Poster.pdf?ua=1 |
| 7.5 | World Health Organization (WHO), Guidelines on Hand Hygiene in Health Care: a Summary, 2009. http://whqlibdoc.who.int/hq/2009/WHO_IER_PSP_2009.07_eng.pdf |


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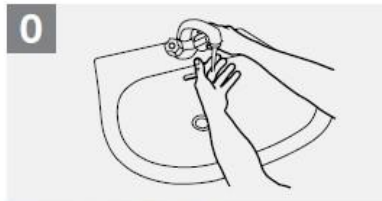
Appendix 1

How to Hand Wash

HOW TO HANDWASH?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

 Duration of the entire procedure: 40-60 seconds



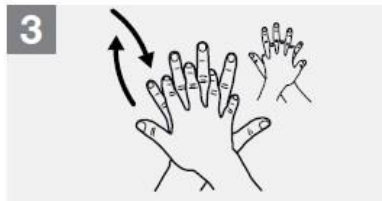
Wet hands with water;



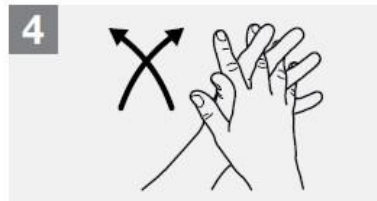
Apply enough soap to cover all hand surfaces;



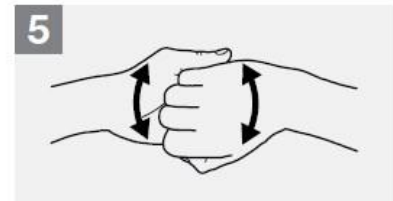
Rub hands palm to palm;



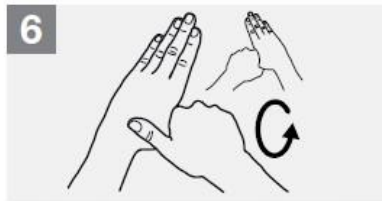
Right palm over left dorsum with interlaced fingers and vice versa;



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;



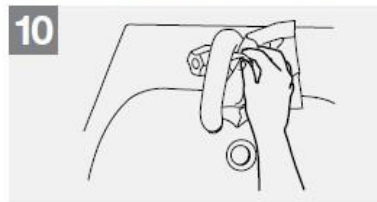
Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



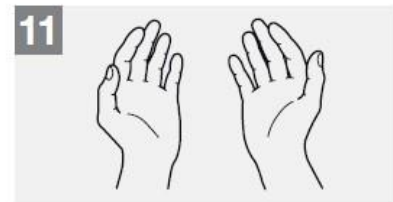
Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.



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Appendix 2

How to Hand Rub

Hand Hygiene Technique with Soap and Water

 Duration of the entire procedure: **40-60 seconds**



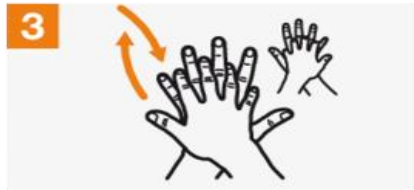
Wet hands with water;



Apply enough soap to cover all hand surfaces;



Rub hands palm to palm;



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



Palm to palm with fingers interlace



Backs of fingers to opposing palms with fingers interlocked;



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



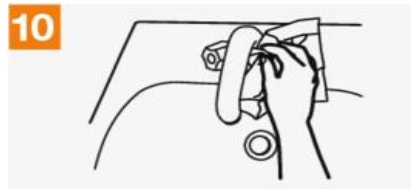
Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



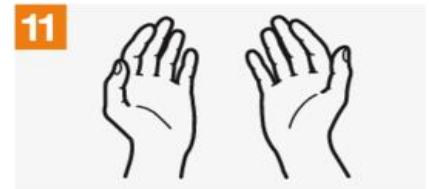
Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.



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Appendix 3

Common Do's and Don'ts

Do's	Don'ts
Place alcohol hand sanitizer at point of patient contact and care	Do not add soap to a partially empty soap dispenser. The practice of "topping up" dispensers can lead to bacterial contamination of soap.
Keep natural nails tips short or less than 1/4-inch long.	Avoid wearing artificial fingernails or extenders when having direct contact with patients. Research shows that artificial nails and nail polish may increase bacterial and fungal colonization.
Provide personnel with efficacious hand-hygiene products that have low irritancy potential, particularly when these products are used multiple times per shift.	Multiple-use cloth towels of the hanging or roll type are not recommended for use in healthcare settings.
Provide healthcare workers with hand lotions or creams to minimize the occurrence of irritant contact dermatitis associated with hand antisepsis or handwashing.	Remove gloves and PPE after caring for a patient. Do not wear the same pair of gloves or PPE for the care of more than one patient. Do not wash gloves between uses with different patients.
Wear gloves, don PPE and follow Standard Precautions as appropriate to the situation when contact with blood or other potentially infectious materials, mucous membranes, and non-intact skin could occur.	
Ensure good hand hygiene practices within the clinic.	