

# Hand Washing



**Lecturer/ Ghazwan Abdul Hussain**

# Introduction

Hand washing is the single most effective way to prevent the spread of germs/micro-organism which prevent communicable diseases. Good hand washing can prevent diseases such as: Shigellosis, E. Coli, Streptococcal Disease, Influenza and the Common Cold.

## **Definition of hand washing:-**

Hand washing or hand hygiene is the act of cleaning one's hands with or without the use of water or another liquid, or with the use of soap for the purpose of removing soil, dirt, and/or micro organisms.

# Why should we clean our hands?

- Healthcare-associated pathogens are most often transmitted from patient to patient through the hands of healthcare workers.
- Hand Hygiene is the single most important measure for preventing the spread of microorganisms in healthcare settings.

# What are your hands carrying?

## Resident Flora:

- Deep seated متجذره
- Difficult to remove
- Part of body's natural defence mechanism
- Associated with infection following surgery/invasive procedures.

e.g: Staphylococcus



## Transient Flora:

- Superficial
- Transferred with ease to and from hands
- Important cause of cross infection
- Easily removed with good hand hygiene.
- e.g: Pseudomonas

# What are types of Hand Hygiene?

- 1. Hand washing.**
- 2. Use of alcohol rubs/gels.**
- 3. Surgical hand 'scrub.**

## ***Hand wash***

- 40-60 seconds*
- for visibly soiled hands & after using alcohol gel several times*
- when handling patients colonized/infected with spore-forming organisms*

## ***Hand rub***

- alcohol-based rub*
- 20-30 seconds*
- for hands that are not visibly soiled*

## ***Hand scrub***

- brush and nail file*
- 5 minutes (first wash of the day); 2-3 minutes (in between operations)*

# When should I wash my hands with Soap and Water?



- Soap and water
  - It takes approximately three minutes to wash and dry your hands effectively.
  - Use when the hands are visibly soiled. The soap and water will wash away the contamination.
  - Use when in contact with a patient who has diarrhoea - alcohol gel won't work.
  - Use if the gel starts to feel 'sticky' on your hands.

# When should I wash my hands with Alcohol Gel?



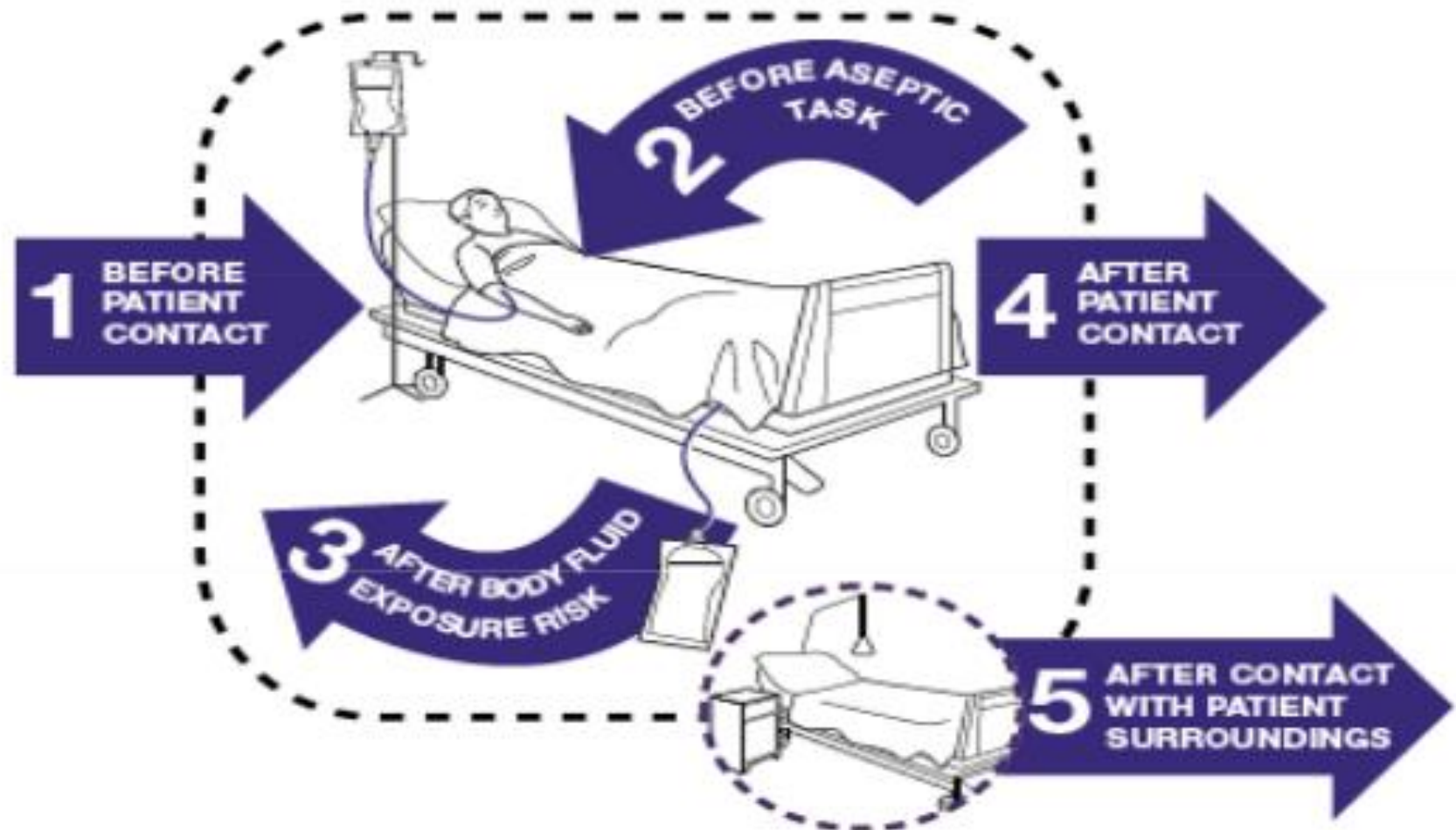
- Alcohol gel
  - Very quick and effective.
  - Use between patients.
  - Use when entering or leaving a ward.
  - Use after removing gloves
  - Doesn't work against *Clostridium difficile* or any of the diarrhoea causing viruses. Use soap and water instead.



# **WHO “My Five (Key) Moments For Hand Hygiene**

1. Before touching a patient
2. Before clean/aseptic procedure
3. After body fluid exposure risk
4. After touching a patient
5. After touching patient surroundings

# When should I clean my hands?



# Moment 1

## Before Touching the patient/resident



### When

Clean the hands before touching the person you are delivering care to

### Why

To protect the persons receiving care from harmful micro-organisms carried on the HCWs hands

### Examples

- Helping someone to get washed or dressed
- Prior to changing incontinence wear
- Taking pulse, blood pressure, examination of skin, abdominal palpation



# Moment 2

## Before a Clean/Aseptic Procedure



**When-** clean the hands immediately before performing an aseptic or clean procedure

**Why-** to protect against micro-organisms from entering the person's body

### Examples

- Oral care, giving eye drops, suctioning
- Skin lesion care, wound dressing, giving an injection
- Urinary catheter insertion and catheter care
- Accessing /commencing a tube feeding system
- Preparation of medication, or doing a dressing
- Taking specimen samples including blood and urine





# Moment 3

## After Body Fluid Exposure Risk



**When** - clean the hands immediately after an exposure risk to body fluids (and after glove removal)

**Why** - to protect the HCW and the healthcare environment from harmful micro-organisms

### Examples

- Clearing up urine, faeces, vomit, handling waste (soiled dressings, tissues, incontinence pads),
- Cleaning of contaminated and visibly soiled material from equipment or the environment (bathroom, commodes)
- Taking blood, urine or faecal samples, emptying urinary catheters

# Moment 4

## After Touching the Client/Resident



4 AFTER  
PATIENT / RESIDENT  
ENVIRONMENT  
CONTACT

**When** - clean the hands after directly touching the person you are when you have completed the care you are providing

**Why** - to protect the HCW and the healthcare environment from harmful micro-organisms

### Examples

- Helping someone to get washed, get dressed,
- Taking pulse, blood pressure.
- After completing an examination on someone



## Moment 5

### After Touching the Patient/ Residents Surroundings



#### When-leaving patients home

Clean the hands after touching any object or furniture or personal items belonging to the person you are caring for which includes their home , even if the person has not been touched

**Why** - to protect the HCW and the healthcare environment from harmful micro-organisms

Examples

- Touching personal items
- Leaving someones home after providing care

# **Important consideration**

- Remove jewellery & remove wrist watches.
- Always use running water at a comfortable temperature
- Wet hands thoroughly before applying any soap.
- Use enough soap to get a visible lather.



# How to perform hand hygiene:-

Proper technique is important when it comes to effective hand hygiene. Without proper hand hygiene technique, we can still spread many micro-organisms with our hands. This section will cover the proper techniques for the following procedures:

1. Wet hands under running water
2. Apply soap and distribute over hands

3. Rub hands together vigorously for 15 seconds to create a good lather: Palm to palm
4. Rub fingertips of each hand in opposite palm
5. Between and around fingers
6. Rub each thumb clasped in opposite hand
7. Rub back of each hand with opposite palm
8. Rinse hands thoroughly under running water.



STEP 1  
Rub palms together.



STEP 2  
Rub the back of both hands.



STEP 3  
Interlace fingers and rub hands together.



STEP 4  
Interlock fingers and rub the back of fingers of both hands



STEP 5  
Rub thumb in a rotating manner followed by the area between index finger and thumb for both hands.



STEP 6  
Rub fingertips on palm for both hands.



STEP 7  
Rub both wrists in a rotating manner. Rinse and dry thoroughly.

# Tips for perfect clean hands

## 1. Fingernails

- Short
- Clean
- Free from nail varnish
- Free from artificial fingernails
- Micro organisms that are not easily removed during hand hygiene.



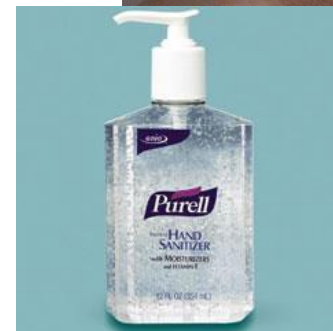
## 2. Jewellery:



No Jewellery are recommended to be worn on the hands & wrists as it become contaminated during work activities and prevent proper hand hygiene procedures.

# Alcohol Gel

- This kills 99.8% of bugs living on your hands
- The gel contains hand moisturisers to keep your hands in good condition – therefore using alcohol gel is much kinder to the hands than soap and water
- Alcohol gel should only be used on visibly clean hands. So if your hands look visibly dirty – wash them.





# Use this technique to clean your hands when using alcohol gel

**1**



**Squirt once or twice into the palm of your left hand**

**2**



**Dip your right hand fingers into the gel making contact with your left palm**

**3**



**Transfer the remaining gel into your right palm**

**4**



**Dip your left hand fingers into the gel making contact with the right palm**

**5**



**Then rub the remaining gel all over your hands, make sure you rub the backs of your hands too.**

**6**



# Types Of Hand Hygiene

Methods	Agent	Purpose	Area	Duration (minimum)
<b>Routine Handwash</b>	Water and non-antimicrobial soap (i.e., plain soap <sup>1</sup> )	Remove soil and transient <sup>2</sup> microorganisms	All surfaces of the hands and fingers	15 seconds <sup>3</sup>
<b>Antiseptic handwash</b>	Water and antimicrobial soap (e.g., chlorhexidine, iodine and iodophors, chloroxylenol [PCMX], triclosan)	Remove or destroy transient microorganisms and reduce resident <sup>5</sup> flora (persistent activity) <sup>8</sup>	All surfaces of the hands and fingers	15 seconds <sup>3</sup>
<b>Antiseptic handrub</b>	Alcohol-based handrub <sup>4</sup>	Remove or destroy transient microorganisms and reduce resident <sup>5</sup> flora (persistent activity) <sup>8</sup>	All surfaces of the hands and fingers	Until the hands are dry
<b>Surgical Antisepsis</b>	Water and antimicrobial soap (e.g., chlorhexidine, iodine and iodophors, chloroxylenol [PCMX], triclosan)	Remove or destroy transient microorganisms and reduce resident flora (persistent activity)	Hands and forearms <sup>6</sup>	2–6 minutes



Finally.....



**ALL HEALTH-CARE WORKERS  
SHOULD CLEAN THEIR HANDS**

**AT THE RIGHT TIME  
IN THE RIGHT WAY**