

Hand Hygiene

Hand hygiene: is defined as a general term that applies to hand washing, antiseptic hand rub (alcohol-based hand rub) or surgical hand antisepsis in order to remove microorganisms.

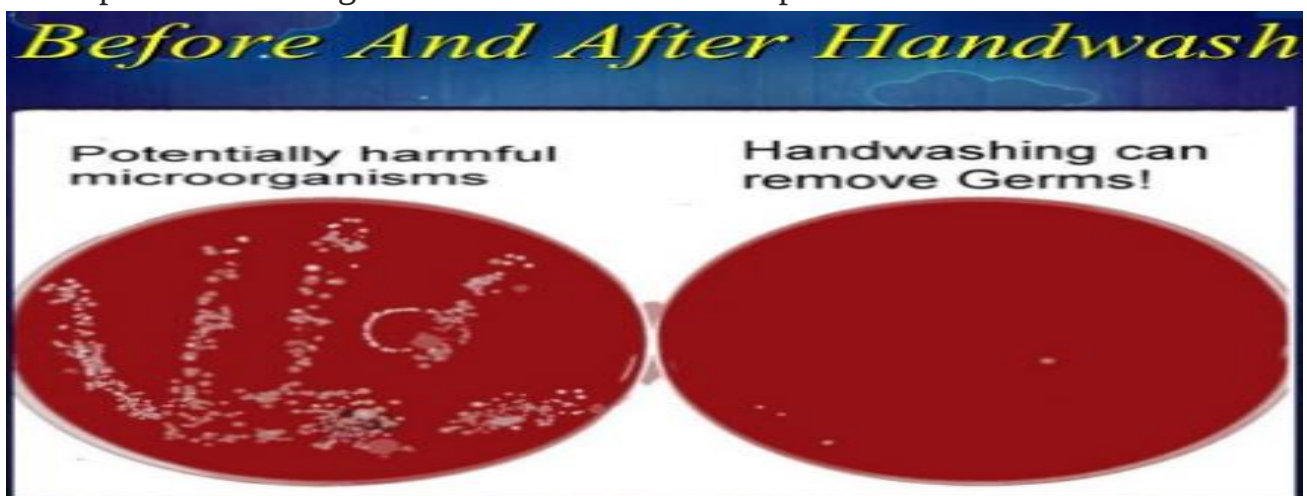
Hand hygiene: is the most effective measure in reducing the risk of transmitting infectious diseases.

Purposes:

- To reduce the number of microorganisms on the hands
- To reduce the risk of transmission of microorganisms to patients, family, friends, coworkers.
- To reduce the risk of transmission of infectious organisms to oneself.
- Using appropriate hand hygiene prevents contamination of the patient's, clients, or resident's environment.

Types of hand hygiene:

1. **Hand Washing:** It is defined as the washing of hands with plain non-antimicrobial soap and water.
2. **Antiseptic hand rub:** also called **alcohol-based hand rub** is the recommended method of hand hygiene in any healthcare. It preferably used when hands are not visibly soiled.
3. **Surgical Antisepsis:** called as a surgical hand scrub. This is to remove as many microorganisms from the hands and forearms as possible before the sterile procedure. Using water and antimicrobial soap such as iodine.



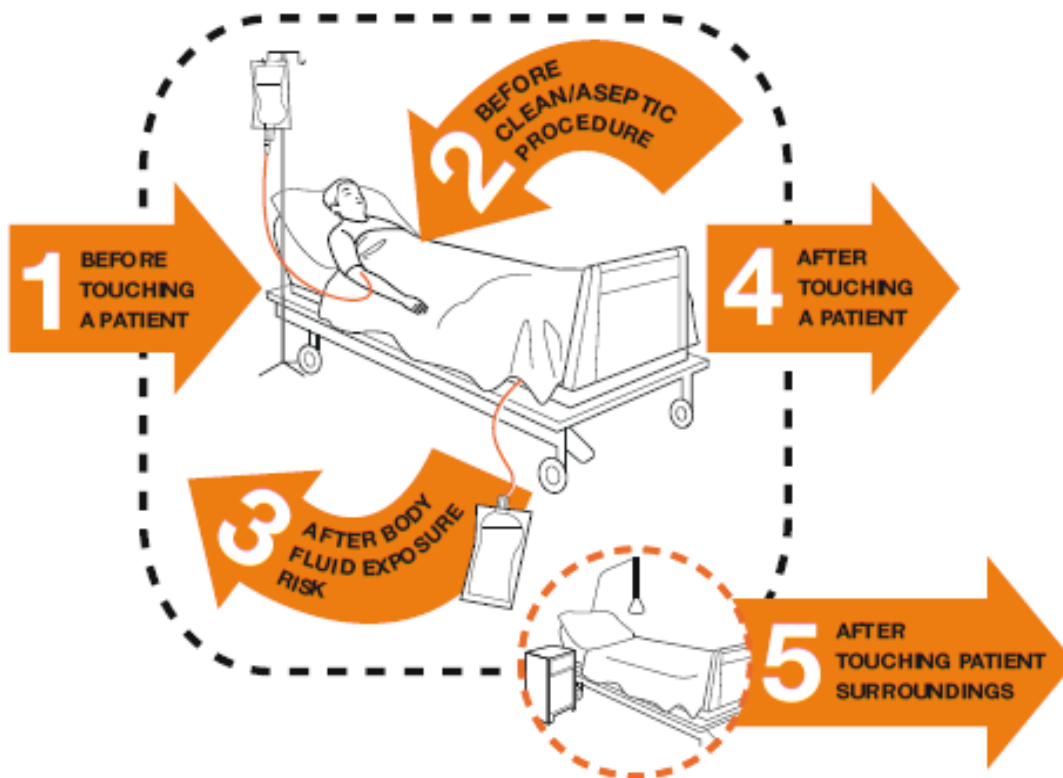
When do you perform Hand Hygiene?

- According to world health organization, 2019 the 5 moments for hand hygiene approach defines the key moments when health-care workers should perform hand hygiene.

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

When?

YOUR 5 MOMENTS FOR HAND HYGIENE



Examples about some key times when hand washing is obligatory

Before:

- Aseptic procedures such as wound care
- Performing invasive procedures such as caring for an intravenous site
- Entering isolation rooms
- transferring of patient
- taking temperature, blood pressure or pulse
- making someone comfortable in bed
- contact with Patient's room
- contact with Patient's equipment
- contact with treatment area or clinic room
- Handling dressings or touching open wounds

After:

- Touching wounds or dressings
- Contact with blood, bodily fluids, non-intact skin or mucous membranes
- Touching equipment contaminated by body fluids, e.g. urine testing equipment, sputum pots
- Removal of gloves
- Cleaning and changing beds or surrounding areas
- Contact with contaminated items
- Performing invasive procedures
- Transferring patient
- Making someone comfortable in bed
- Contact with patient room or equipment,
- Contact with treatment area or clinic room

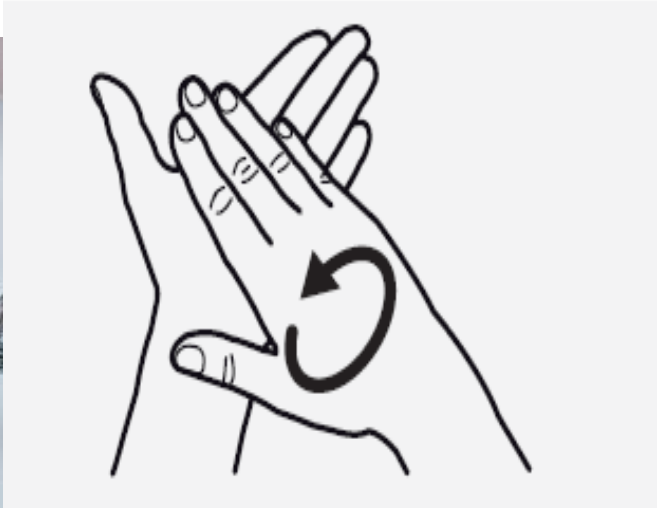
Procedure of hand washing

Equipment:

- **Antiseptic hand rub:** Alcohol-based, waterless
- **Hand washing**
 - Easy-to-reach sink with warm running water
 - Soap
 - Paper towels
 - Hand lotion

N	Steps	Rationale
1.	Check surface of hands for breaks or cuts in skin.	<i>A nurse who has open sores may require a work assignment with decreased risk for transmission of infectious organisms due to the chance of acquiring or passing on an infection</i>
2.	Inspect hands for visible soiling.	If hands are visibly soiled, use soap and water until soil is removed.
3.	Inspect condition of nails. Natural tip less than 0.5 CM long and free of artificial nails, or polish. Nails should be kept short.	<i>Short, natural nails are less likely to harbor microorganisms, scratch a client, or puncture gloves</i>
4.	Removal of all jewelry is recommended (e.g. rings, bracelet, or watch), and push long uniform sleeves above wrists.	<i>Microorganisms can lodge in the settings of jewelry and under rings. Removal facilitates proper cleaning of the hands and arms. Provides complete access to fingers, hands, and wrists.</i>
	Antiseptic hand rub	
a.	Apply an ample amount of product to palm of one hand (Apply waterless antiseptic to hands). 	Enough products are needed to thoroughly cover the hands.

b.	Rub hands together, covering all surfaces of hands and fingers with antiseptic. 	Covering all aspects of the hands kills transient bacteria; ensures complete antimicrobial action.
c.	Rub hands together for several seconds until alcohol is completely dry.	Provides enough time for antimicrobial solution to be effective.
Hand washing with soap and water		
	Stand in front of sink, keeping hands and uniform away from sink surface. (If hands touch sink during hand washing, repeat process.)	Inside of sink is a contaminated area. Reaching over sink increases risk of touching edge, which is contaminated.
	Turn on water. Turn faucet on or push knee pedals laterally or press pedals with foot to regulate flow and temperature. 	Knee pedals within the operating room and treatment areas are preferred to prevent hand contact with faucet.
	Avoid splashing water against uniform.	Microorganisms travel and grow in moisture.
	Regulate flow of water so temperature is warm.	• Warm water removes less of the protective oil of the skin than hot water.

	- Wet hands and wrists thoroughly under running water. - Keep hands and forearms lower than elbows during washing so that the water flows from the arms to the fingertips	Hands are the most contaminated parts to be washed. Water flows from least to most contaminated area, rinsing microorganisms into the sink.
	- Apply enough soap (3 to 5 mL) - Rub hands together, lathering thoroughly. (Rub hands palm to palm). 	Ensures that all surface areas of the hands and fingers are cleaned. 
	Wash hands using firm, rubbing, and circular movements to wash the palm, back, and wrist of each hand. Be sure to include the heel of the hand. Interlace the fingers and thumbs, and move the hands back and forth. Continue these motions for about 30 seconds • <u>By following these steps:</u> A. Right palm over left dorsum with interlaced fingers and vice versa 	• <i>The circular action creates friction that helps remove microorganisms mechanically. Interlacing the fingers and thumbs cleans the inter-digital spaces</i>

B. Palm to palm with fingers interlaced



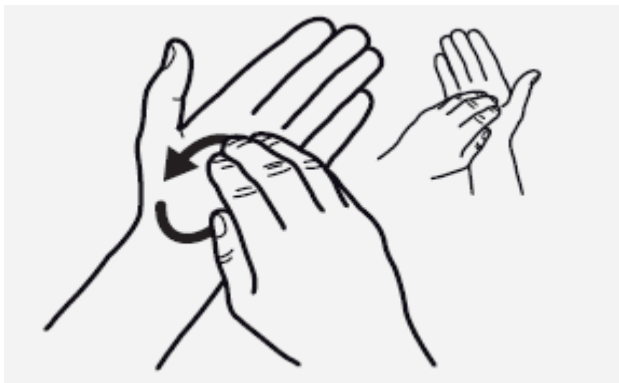
C. Backs of fingers to opposing palms with fingers interlocked



D. 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.



• *The nails and fingertips are commonly missed during hand hygiene*

Rinse hands and wrists thoroughly, keeping hands down and elbows up

• *Running water rinse the skin to get rid of microorganisms and dirt as much as possible from*

		it.
	Dry hands thoroughly from fingers to wrists and forearms with paper towel, single-use cloth, or warm air dryer.	Drying from cleanest (fingertips) to least clean (forearms) area avoids contamination. Drying hands prevents chapping and roughened skin.
	If used, discard paper towel in proper receptacle.	Prevents transfer of microorganisms.
	• Thoroughly pat dry the hands and arms. • Dry hands and arms thoroughly with a paper towel without scrubbing then • Discard the paper towel in the appropriate container	• <i>Moist skin becomes chapped readily as does dry skin that is rubbed vigorously; chapping produces lesions</i>
	Turn off water with foot or knee pedals. To turn off hand faucet, use clean, dry paper towel; avoid touching handles with hands 	• <i>This prevents the nurse from picking up microorganisms from the faucet handles</i>
	• Apply hand lotion if desired	• <i>Hand lotions are important to prevent skin dryness and irritation.</i>

Handy Tips

- ❖ Contaminated surfaces or objects **should not be touched after performing hand hygiene.**
- ❖ Avoid touching your face, eyes and nose after performing hand hygiene.
- ❖ Include frequently missed areas when performing hand hygiene such as thumbs, palms, web spaces, under nails and the backs of fingers and hands.
- ❖ Use supplied lotions that are compatible with hand hygiene products and gloves to minimize skin irritation that can occur with frequent hand hygiene.

How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED



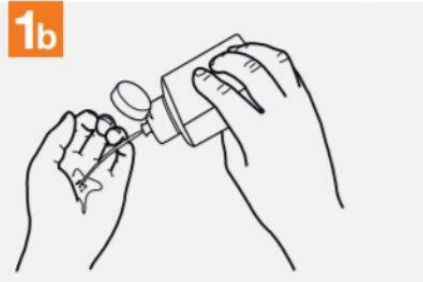
Duration of the entire procedure: 20-30 seconds

1a



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

1b

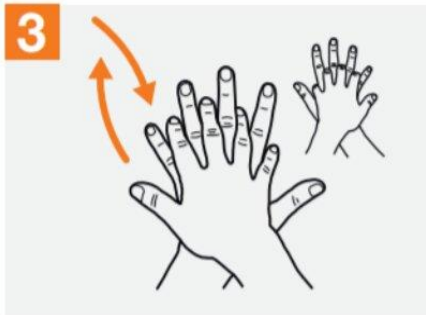


2



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



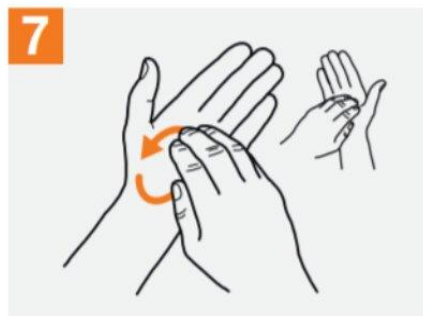
Backs of fingers to opposing palms with fingers interlocked;

6



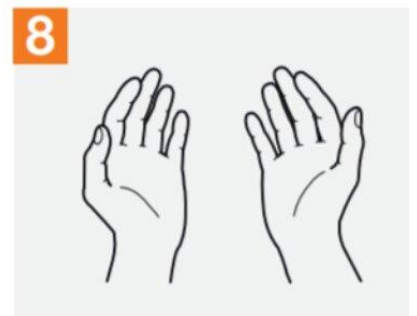
Rotational rubbing of left thumb clasped in right palm and vice versa;

7



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

8



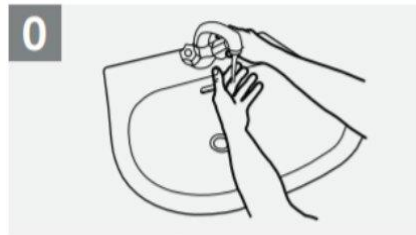
Once dry, your hands are safe.

How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB



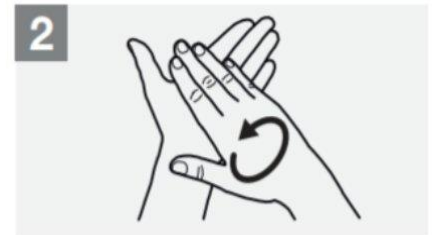
Duration of the entire procedure: 40-60 seconds



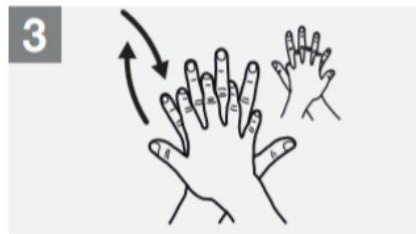
Wet hands with water;



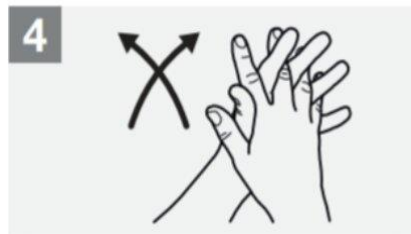
Apply enough soap to cover all hand surfaces;



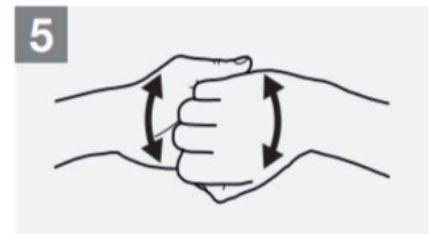
Rub hands palm to palm;



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



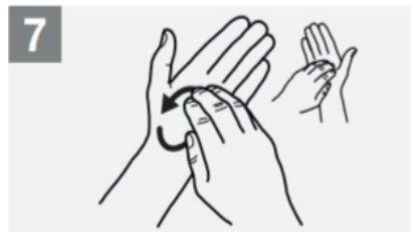
Palm to palm with fingers interlaced;



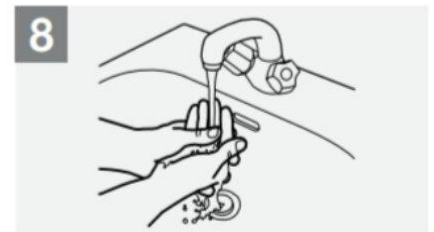
Backs of fingers to opposing palms with fingers interlocked;



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;



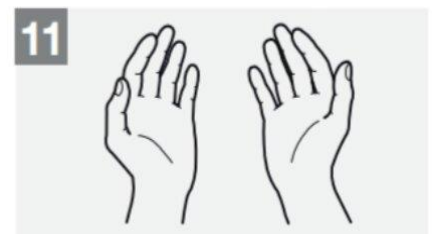
Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.

Frequently Missed Areas When Handwashing

MISSED SPOTS WHEN HAND-WASHING



- MOST FREQUENTLY MISSED
- LESS FREQUENTLY MISSED
- NOT MISSED