

# **Principles Of Aseptic Washing hands**

## Definition.

- **Aseptic** is the state of being free from disease-causing contaminants (such as bacteria, viruses, fungi, and parasites).
- **Antiseptics** (from Greek αντί -anti, "against" + σηπτικός -septikos, "putrefactive") are antimicrobial substances



## Improving hand hygiene practice. Why?



- Bacteria that cause hospital-acquired infections most commonly transmitted via HCW's hands.
- Studies have shown that washing hands between patients reduces spread of bacteria in health care
- HCW (Health care worker) handwashing compliance rate 40%.

## Specific Indications for Hand Hygiene.

- Before patient contact
- Before donning gloves for procedures such as insertion of central lines, urinary catheters, peripheral IVs
- After contact with a patient's skin
- After contact with body fluids or excretions, non-intact skin, wound dressings
- After removing gloves

## Many personnel don't realize when they have germs on their hands.

Simple tasks can contaminate hands:

- Taking a patient's vital signs
- Touching the patient's clothing or linens
- Touching equipment and furniture nearby



## Soap & Water vs. Alcohol Hand Rub

- Alcohol hand rub more effective at reducing bacterial counts on hands compared with soap & water.
- Easier to locate nearby.
- Requires stock maintenance.
- The soap is less irritating to the skin.
- Saves time (56 min vs 18 min in 8 h).

## Finger Nails and Rings

- Keep natural nail tips < 1/4 inch in length
- No artificial nails or extenders when having direct contact with high-risk patients (e.g., ICU, OR)
- Recommendations on rings unresolved



## Washing hands

- Hand-washing is one of the most important tools in public health.
- Minimum duration 20 seconds

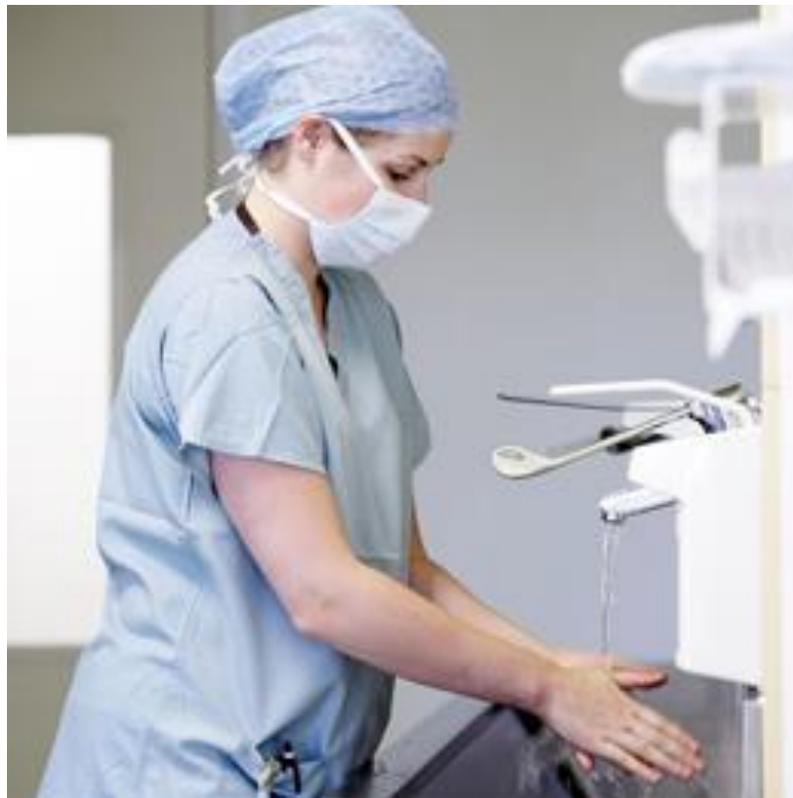
**The forearm zone should be released from clothes by raising them**



**Place in front of the sink, but don't touch it.**



**Use special devices to open the water.**



Water flow should be as large as possible, but don't spray areas outside the perimeter of the sink.

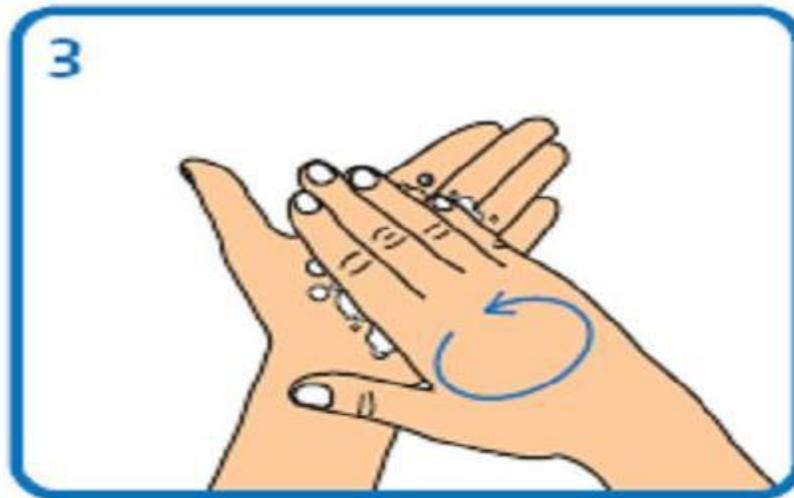
**Wet hands by placing them under running water, fingers should be directed downwards.**



**Take 4-5 ml of soap.**

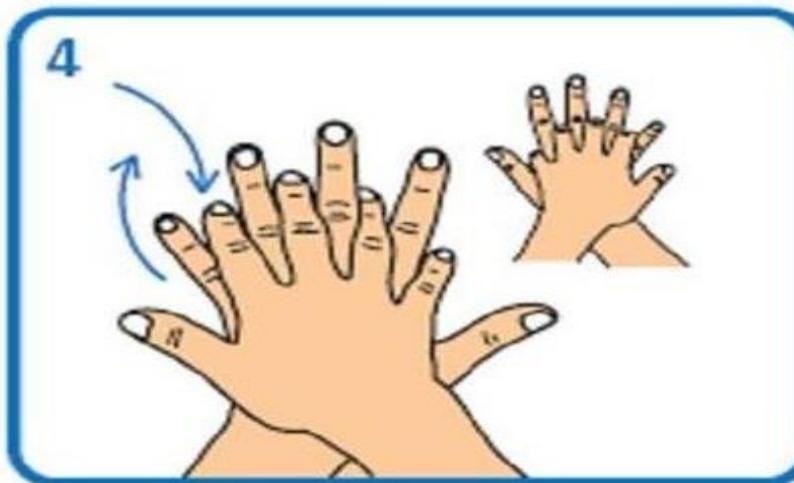


**Rub hands: palm to palm, circular direction.**



Rub hands palm  
to palm

**Rub hands: right palm over left dorsum with interlaced fingers, left palm over right dorsum with interlaced fingers.**



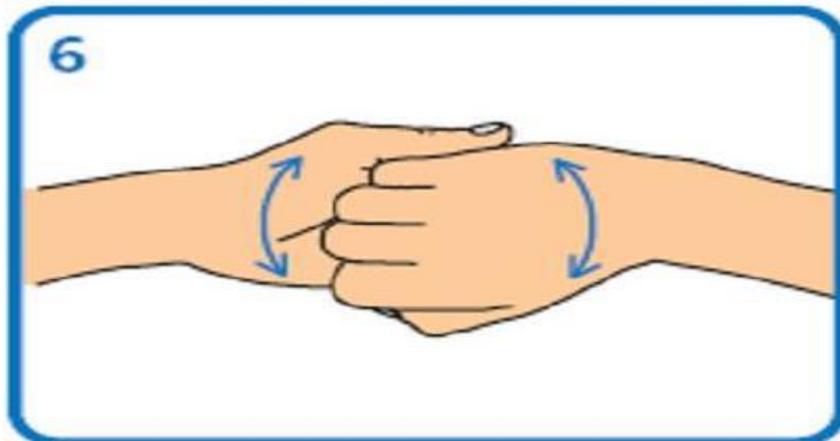
Rub back of each hand  
with palm of other hand  
with fingers interlaced

**Rub hands: left palm over right dorsum with interlaced fingers.**



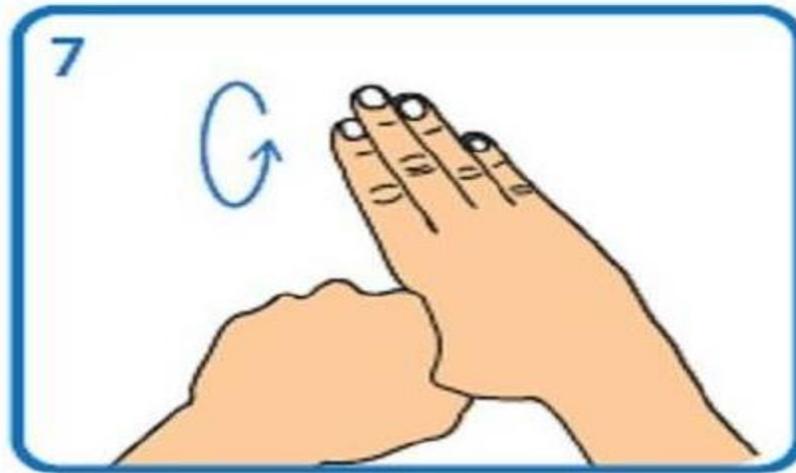
Rub palm to palm with  
fingers interlaced

**Rub fingertips with circular movements, backs of fingers to opposing palms  
with fingers interlocked**



Rub with back of fingers  
to opposing palms with  
fingers interlocked

**Rub of thumb: rotational rubbing of the left thumb clasped in right palm and vice versa**



Rub each thumb clasped in opposite hand using a rotational movement

**Rotational rubbing**



Rub tips of fingers in opposite palm in a circular motion

**Rinse hands by placing them under running water, fingers should be directed downwards.**



Rinse hands with water

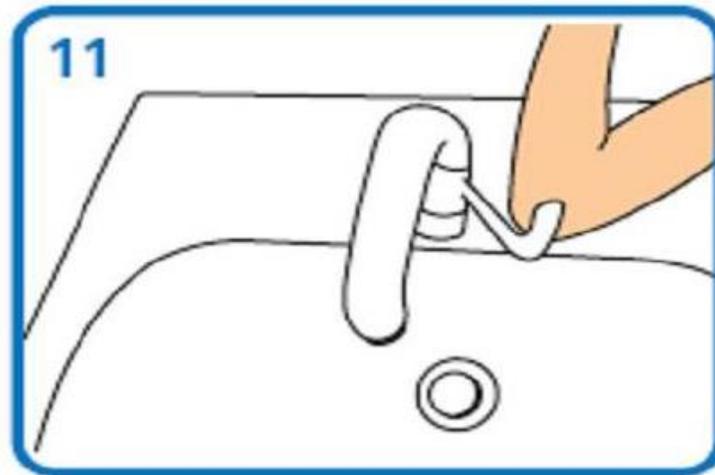
**Dry hands with paper towel:**

- fingertips should be directed up
- by plugging no rubbing
- unidirectional, from fingertip to wrist
- use a new paper towel switching to other hands



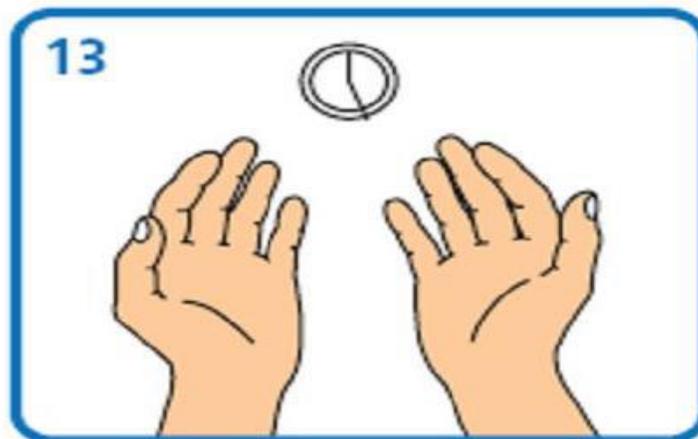
Dry thoroughly with a single-use towel

**Use elbow to turn off tap**



Use elbow to  
turn off tap

**Hand washing should take 15 – 30 seconds**



Hand washing should take  
15–30 seconds

## **Knowledge verification questions:**

### **1. Name the definition of asepsis.**

- a. **Aseptic** is the state of being free from disease-causing contaminants (such as bacteria, viruses, fungi, and parasites).

### **2. What are antiseptics?**

- b. Antiseptics are antimicrobial substances.

### **3. Improving hand hygiene practice. Why?**

- a. Bacteria that cause hospital-acquired infections most commonly transmitted via HCW's hands.
- b. Studies have shown that washing hands between patients reduces spread of bacteria in health care.
- c. HCW (Health care worker) handwashing compliance rate 40%.

### **4. Specific indications for hand hygiene are:**

- Before patient contact.
- Before donning gloves for procedures such as insertion of central lines, urinary catheters, peripheral IVs.
- After contact with a patient's skin.
- After contact with body fluids or excretions, non-intact skin, wound dressings.
- After removing gloves.

### **5. What are the simple tasks that can contaminate your hands:**

- Taking a patient's vital signs.
- Touching the patient's clothing or linens.
- Touching equipment and furniture nearby.

### **6. Soap and water vs. alcohol.**

- Alcohol hand rub more effective at reducing bacterial counts on hands compared with soap & water.
- Easier to locate nearby.
- Requires stock maintenance.
- The soap is less irritating to the skin.
- Saves time (56 min vs 18 min in 8 h).

### **7. Hand washing includes a series of steps to perform the procedure correctly, name these steps:**

- The forearm zone should be released from clothes by raising them
- Place in front of the sink, but don't touch it.

- Use special devices to open the water.
- Wet hands by placing them under running water, fingers should be directed downwards.
- Take 4-5 ml of soap.
- Rub hands: palm to palm, circular direction.
- Rub hands: right palm over left dorsum with interlaced fingers, left palm over right dorsum with interlaced fingers.
- Rub hands: left palm over right dorsum with interlaced fingers.
- Rub fingertips with circular movements, backs of fingers to opposing palms with fingers interlocked.
- Rub of thumb: rotational rubbing of the left thumb clasped in right palm and vice versa.
- Rotational rubbing.
- Rinse hands by placing them under running water, fingers should be directed downwards.
- Dry hands with paper towel.
- Use elbow to turn off tap.
- Hand washing should take 15 – 30 seconds.

## Tests.

### 1. Name the definition of asepsis.

- a. \* Aseptic is the state of being free from disease-causing contaminants (such as bacteria, viruses, fungi, and parasites).
- b. Aseptic is the state of being contaminated by disease-causing factors (such as bacteria, viruses, fungi, and parasites).
- c. Aseptic is the condition of identifying microorganisms (such as bacteria, viruses, fungi, and parasites).
- d. Aseptic is the condition of not being contaminated with causes of specific to surgery diseases.
- e. The aseptic is the state of total destruction of the causes of disease such as bacteria, viruses, fungi, and parasites).

### 2. What are antiseptics?

- a. \* Antiseptics are antimicrobial substances.
- b. Antiseptics are a class of antibiotics.
- c. Antiseptics are disinfectants.
- d. Antiseptics are substances used only in surgery.
- e. No answer is correct.

### 3. Improving hand hygiene practice. Why?

- a. \* Bacteria that cause hospital-acquired infections most commonly transmitted via HCW's hands.
- b. \* Studies have shown that washing hands between patients reduces spread of bacteria in health care.
- c. \* HCW (Health care worker) handwashing compliance rate 40%.
- d. Studies have shown that washing hands between patients not reduces spread of bacteria in health care.
- e. HCW (Health care worker) handwashing compliance rate 60%.

### 4. Specific indications for hand hygiene are:

- a. \* Before patient contact.
- b. \* Before donning gloves for procedures such as insertion of central lines, urinary catheters, peripheral IVs.
- c. \* After contact with a patient's skin.
- d. \* After contact with body fluids or excretions, non-intact skin, wound dressings.
- e. While using gloves.

**5. What are the simple tasks that can contaminate your hands:**

- a. \* Taking a patient's vital signs.
- b. \* Touching the patient's clothing or linens.
- c. \* Touching equipment and furniture nearby.
- d. Taking anamnesis of the disease.
- e. Hand contamination is a less common phenomenon.

**6. Soap and water vs. alcohol:**

- a. \* Alcohol hand rub more effective at reducing bacterial counts on hands compared with soap & water.
- b. \* Easier to locate nearby.
- c. \* Requires stock maintenance.
- d. \* The soap is less irritating to the skin.
- e. Using alcohol does not save time for hand hygiene

**7. Hand washing includes a series of steps to perform the procedure correctly, name these steps:**

- a. \* The forearm zone should be released from clothes by raising them.
- b. \* Place in front of the sink, but don't touch it.
- c. \* Use special devices to open the water.
- d. \* Wet hands by placing them under running water, fingers should be directed downwards.
- e. Take 4-5 ml of etanol.

**8. Hand washing includes a series of steps to perform the procedure correctly, name these steps:**

- a. \* Rub hands: palm to palm, circular direction.
- b. \* Rub hands: right palm over left dorsum with interlaced fingers, left palm over right dorsum with interlaced fingers.
- c. \* Rub hands: left palm over right dorsum with interlaced fingers.
- d. \* Rub fingertips with circular movements, backs of fingers to opposing palms with fingers interlocked.
- e. Rub of left thumb: rotational rubbing of the left thumb clasped in right palm.

**9. Hand washing includes a series of steps to perform the procedure correctly, name these steps:**

- a. Longitudinal rubbing of the forearms.
- b. \* Rinse hands by placing them under running water, fingers should be directed downwards.
- c. \* Dry hands with paper towel.

- d. \* Use elbow to turn off tap.
- e. \* Hand washing should take 15 – 30 seconds.