



Hand Hygiene

Hand hygiene is the cornerstone of infection prevention and control. We have developed this module to provide you with information to be able to effectively carry out hand hygiene.

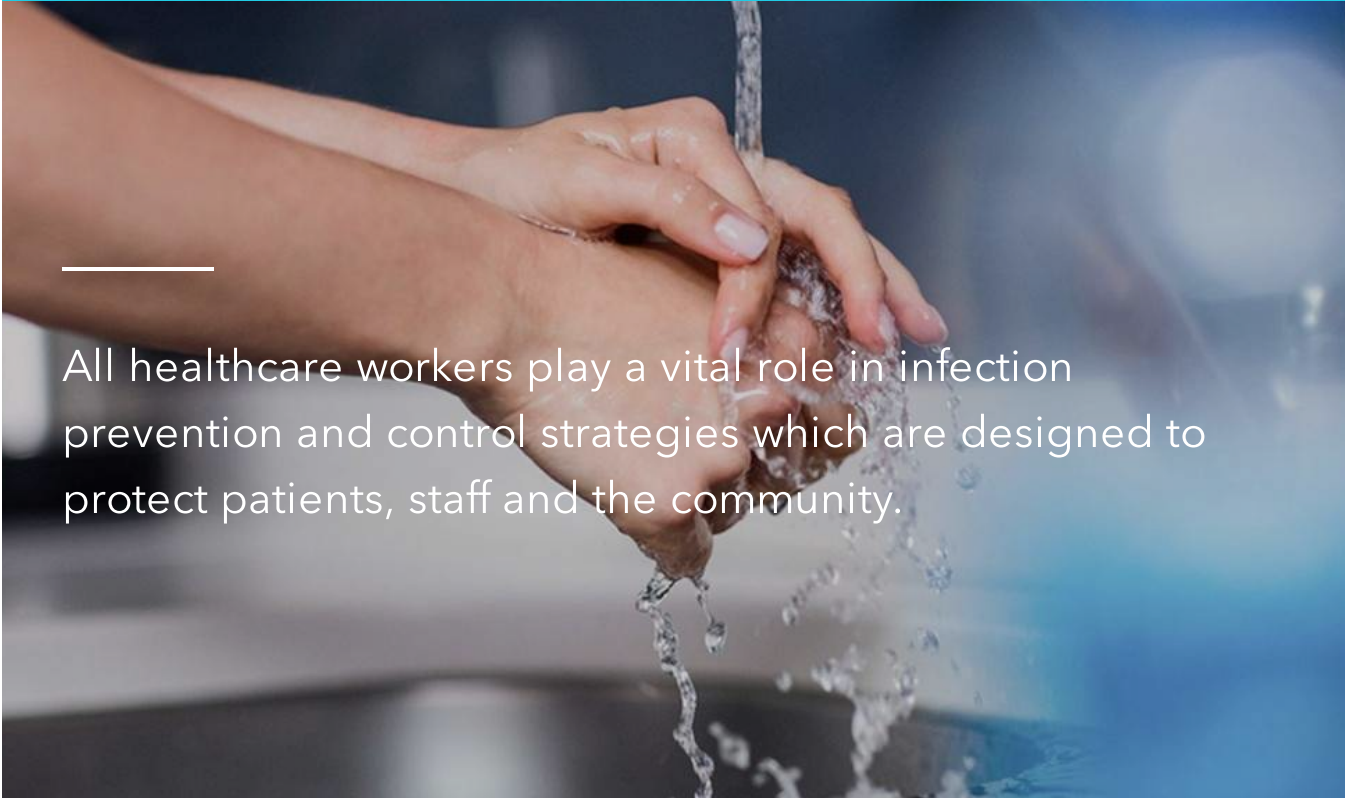
- ≡ Introduction
- ≡ What is Hand Hygiene and why is it important?
- ≡ Hand Hygiene Methods
- ≡ Hand Hygiene Techniques
- ≡ The Four Moments of Hand Hygiene
- ≡ Factors that Impact Effectiveness
- ≡ Check your Knowledge
- ≡ Conclusion & References

QUESTION BANKS

Introduction

Did You Know?

At least 30% of health care associated infections (HAI) can be prevented by following infection prevention and control (IPAC) measures.



All healthcare workers play a vital role in infection prevention and control strategies which are designed to protect patients, staff and the community.

This course is provided to help you understand how you can protect yourself and your patients from the spread of infections. We will review effective hand hygiene methods and techniques, as well as the four moments when hand hygiene should be used. We will also discuss some of the factors that impact the effectiveness of hand hygiene.

Let's get started!

What is Hand Hygiene and why is it important?

What is the primary purpose of hand hygiene?

- To reduce the number of microorganisms on the hands
- To keep hands clean
- To keep nails clean
- To maintain skin integrity

SUBMIT

True or False?

Glove use is a substitute of hand hygiene.

True

False

SUBMIT



Answer the two questions above before moving on.

What is hand hygiene?

The action of hand cleaning is considered in general terms as hand hygiene. It encompasses the removal of visible soil and removal or killing of transient microorganisms from the hands. This may be accomplished using an alcohol-based hand rub or soap and running water. It includes surgical hand antisepsis as well.

Why is hand hygiene important?

Healthcare associated infections (HAI) remain a client/patient/resident safety issue and represent a significant adverse outcome of the health care system. Patients with one or more HAI during in-patient stay remain in hospital and incur costs on average three times greater than uninfected patients. Furthermore, reporting of hand hygiene is provincially required due to its importance.



Public Health
Agency of Canada

“Adherence to hand hygiene recommendations are the single most important practice for preventing the transmission of microorganisms in health care and directly contribute to patient safety.”

Public Health Agency of Canada

Hand hygiene is the responsibility of:

- All individuals involved in health care
- Infection control practitioners
- Physicians



Nurses

SUBMIT



Answer the question above before moving on.

Hand Hygiene Methods



There are two main methods of hand hygiene

- 1 Alcohol-based hand rub
- 2 Soap and water

CONTINUE

Alcohol-based Hand Rub:

- To be used when hands not visibly soiled
- Quick and Easy (approximately 15 seconds)
- Easily accessible throughout the hospital
- Significantly reduce the number of microorganisms on skin
- Fast acting

Soap and Water:

- To be used when hands are visibly soiled
- Mechanical action of washing, rinsing and drying removes most of transient bacteria
- Hand hygiene sinks are less accessible when compared to alcohol based- hand rub dispensers

CONTINUE

What do you think is the preferred method at GRH?

Click here to reveal the answer

Alcohol-based Hand Rub



Click the box above before moving on.

Why is the alcohol-based hand rub the preferred method?

- It is the only available method at GRH
- It is more accessible than hand hygiene sinks



It has a great smell and staff are more likely to use it

SUBMIT

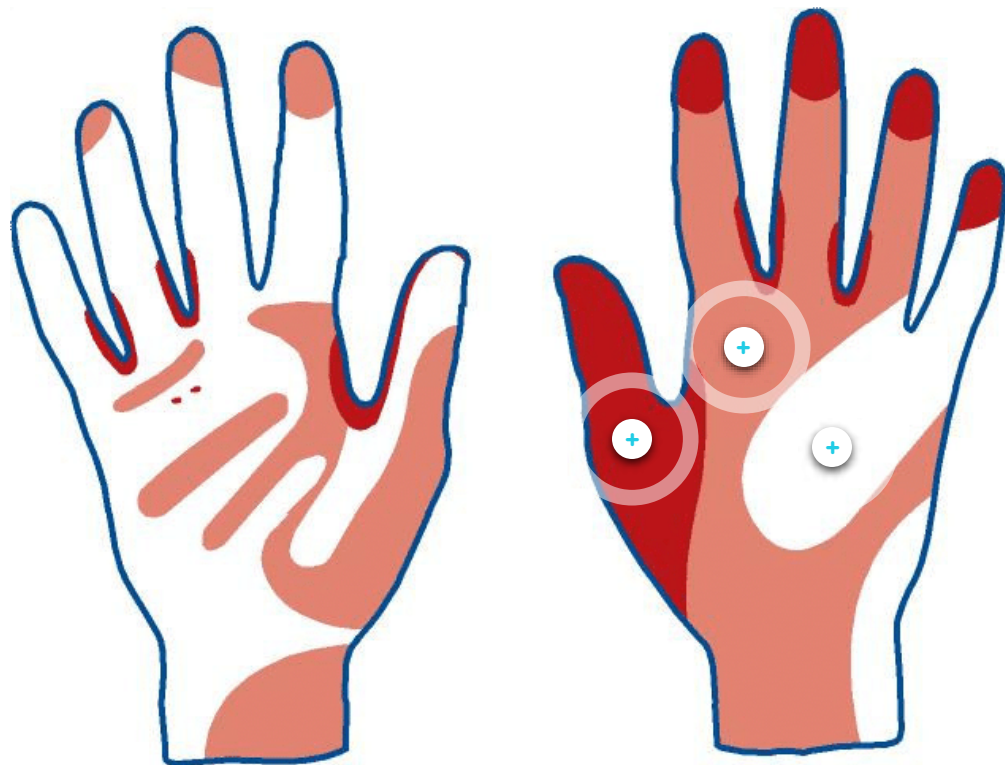


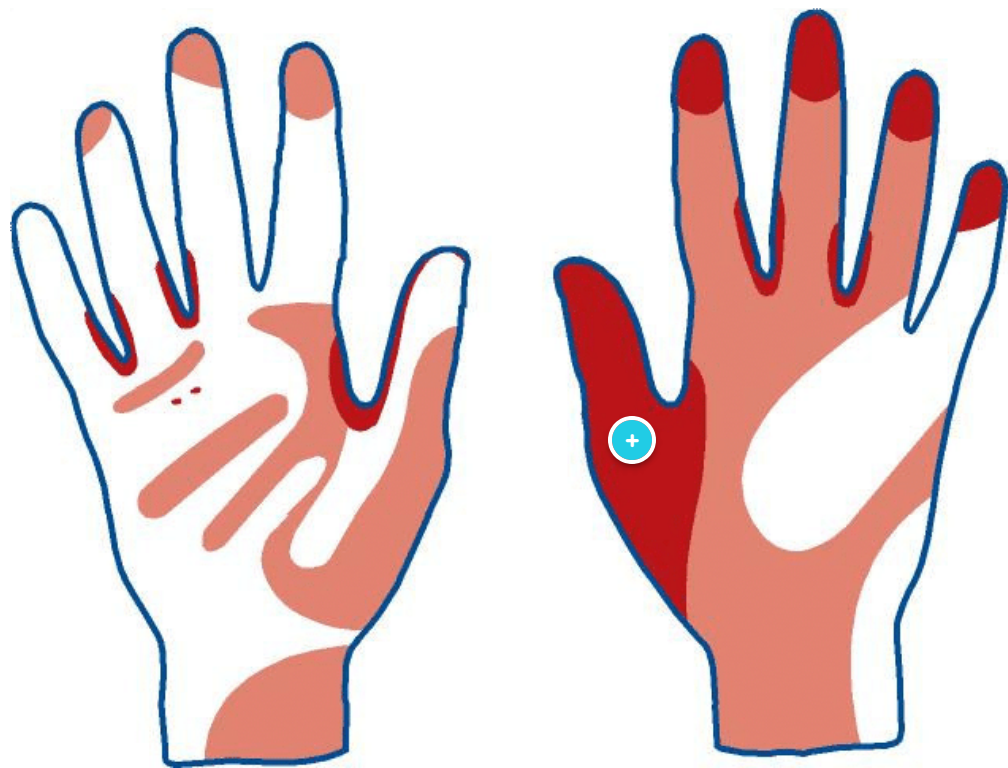
Complete the question above before moving on.

Hand Hygiene Techniques

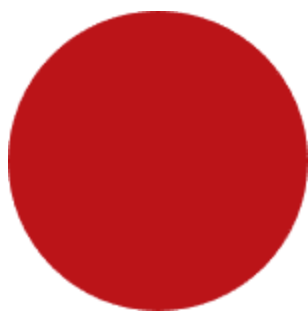
Do you know what the most frequently missed areas are when performing hand hygiene?

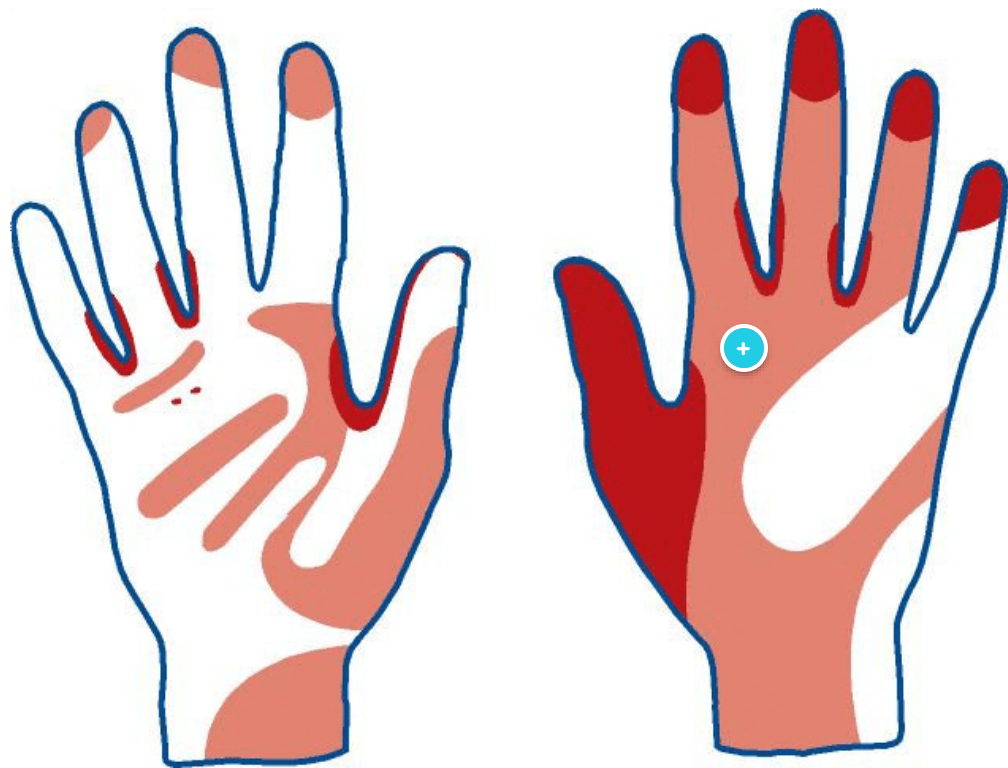
Click on the areas of the hand below to find out!



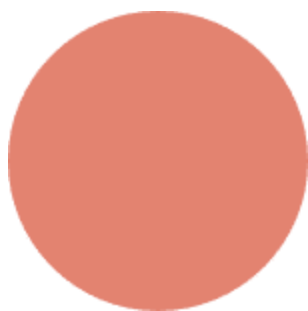


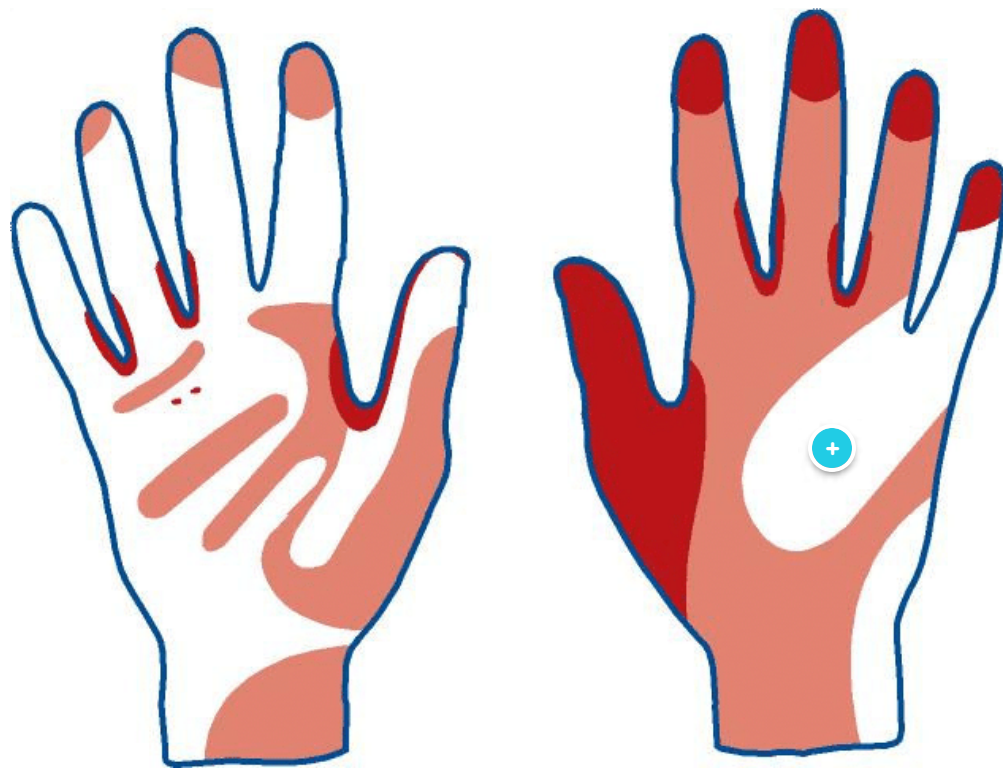
These are the most frequently missed areas



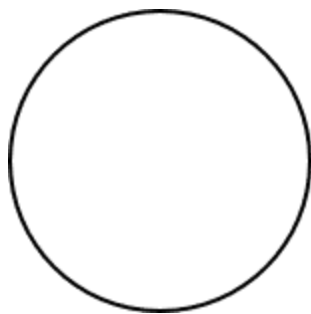


These areas are sometimes missed





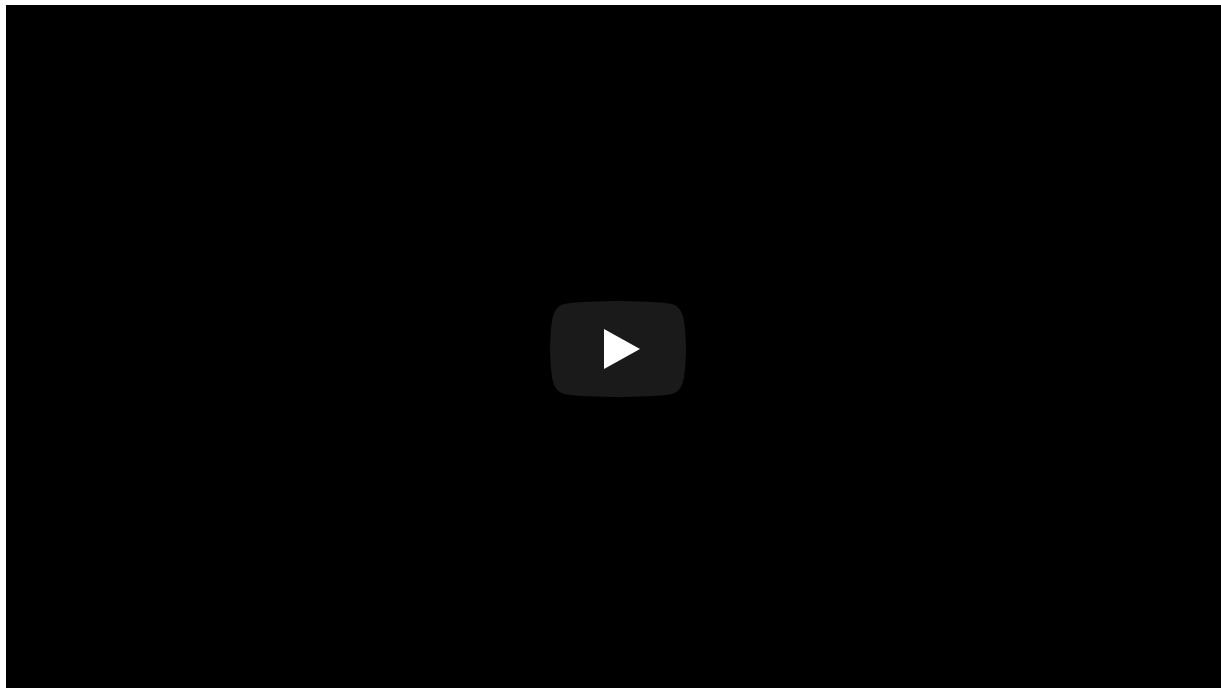
These areas are the least frequently missed



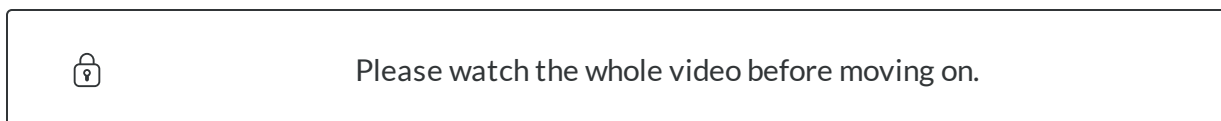
Click on all the three + signs above above before moving on.

How can we avoid this?

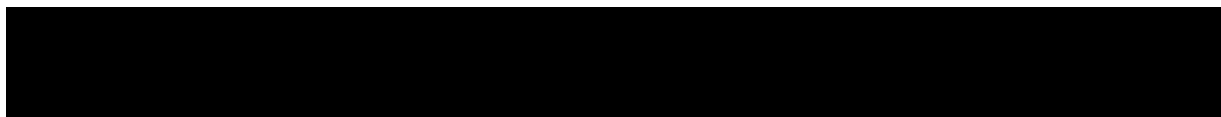
The videos below demonstrates the best techniques to use with each method, starting with the alcohol-based rub:

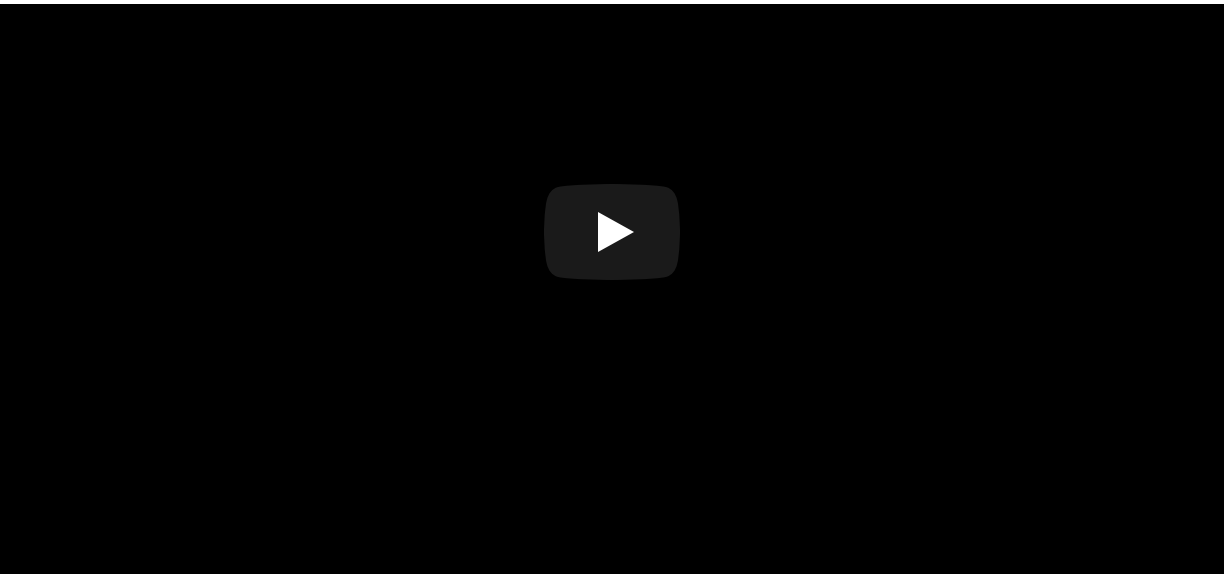


Steps to performing hand hygiene with alcohol based hand rub (ABHR): Apply ABHR and rub hands together vigorously covering all surfaces of wrists, hands and fingers for a minimum of 15 seconds or until dry.



The next video demonstrates the best techniques to use with soap and water:





Steps of performing hand hygiene with soap and water:

1. Turn on the water and adjust to a comfortable temperature.
2. Wet the hands and lower two-thirds of the forearms, holding hands down.
3. Apply the soap and, using friction, lather the hands and forearms taking approximately 15 seconds to complete the procedure. Pay particular attention to between the fingers, around the nails and across the knuckles.
4. Hold the hands down and rinse thoroughly under running water.
5. Dry hands well with paper towel. To minimize irritation to skin it is advisable to use a patting motion when drying hands.
6. Turn the faucet off with another piece of paper towel to avoid contaminating clean hands.



Please watch the whole video before moving on.

The Four Moments of Hand Hygiene



We have learned **HOW** to wash our hands effectively, now let's have a look at **WHEN** to wash our hands.

The Four Moments of Hand Hygiene

There are moments in which the risks of microorganism transmission on the hands are the highest. The *four moments of hand hygiene* helps to identify these instances.

Your 4 Moments for Hand Hygiene



The four moments for hand hygiene:

1. Before initial patient/patient environment contact
2. Before aseptic procedure
3. After body fluid exposure risk
4. After patient/patient environment contact

Check Your Understanding

Drag each scenario on the left to match with its corresponding *Hand Hygiene Moment* on the right.

SUBMIT



Complete the matching exercise above before moving on.

Factors that Impact Effectiveness



While the below guidelines are important for everyone to consider, they are **essential** and must be followed if you do any of the following as part of your work:

- Work in a clinical care area and provide direct or indirect care to patients (nurses, physicians, dietary, housekeeping, allied health, etc)
- Have contact with the patient's environment

- Process surgical instruments or equipment
- Prepare food

CONTINUE

Hand Care:

- Any open cracks or breaks in the skin must be covered with an appropriate dressing.
- If you have a chronic skin conditions and/or discharging sores or undiagnosed rashes, you will require an assessment and approval from your department manager and Occupational Health prior to returning to your regular duties.



An example of open cracks or breaks in the skin that must be covered with an appropriate dressing

CONTINUE

Fingernails:

- Artificial fingernails or enhancements are not permitted due to the strong association with infection.
- Nail polish may be worn if fresh and not chipped.
- Fingernails must be kept clean and short (not visible past the end of the finger).

Jewelry:

- Jewelry worn below the elbow is restricted to a smooth band (no stones) and a watch that can be pushed up to perform hand hygiene.



CONTINUE

Splints:

- If you wear a splint that may interfere with performing hand hygiene, the splint must be assessed on an individual basis, and a risk assessment must be performed jointly by IPAC and Occupational Health and Safety.

CONTINUE

Gloves:

- Glove use does not replace the necessity for hand hygiene
- Hands must be cleaned before donning and after doffing gloves
- Gloves are not completely free of leaks, and tears/punctures can occur
- Gloves must be removed immediately and discarded after the activity for which they are used
- Gloves must not be washed or re-used (clients/patients/residents)

CONTINUE

Check your Knowledge

Which of the situations below **require** you to perform appropriate hand hygiene?

Check all that apply:

- a) I am going to clean my patient's wound site.
- b) I am outside of the patient room waiting for my colleague to ask her a question.
- c) I am going into the patient's room to check if he needs a laxative.
- d) I have just completed examining the patient's skin lesions.
- e) I am working at the dialysis clinic and have just touched Patient A equipment, and will just move on to check Patient B equipment. I will not touch any of the patients.

SUBMIT



Complete the question above before moving on.

What was the first Moment that was missed in the video below?
Watch the video and answer the question that follows.

Verify to continue

We detected a high number of errors from your connection. To continue, please confirm that you are human (not a spambot).

vimeo

I'm not a robot



reCAPTCHA
Privacy - Terms

What was the first Moment that was missed?

- Moment 1 was missed first
- Moment 2 was missed first
- Moment 3 was missed first
- Moment 4 was missed first

SUBMIT



Complete the question above before moving on.

A nurse performs hand hygiene, changes Ms. M's diaper. The nurse then performs hand hygiene and enters another room to help Mr.C change into his clothes before his discharge. The nurse then performs hand hygiene

What moment was missed?

- Moment 1 was missed

- Moment 2 was missed
- Moment 3 was missed
- Moment 4 was missed
- No misses, Hand hygiene was performed as required

SUBMIT

An RPN enters Ms. Saffron's room, performs hand hygiene and helps her to arrange her pillow on the bed. She then proceeds to uncover the patient's wound dressing on her foot, cleans it, performs hand hygiene and leaves the room.

What moment was missed?

- Moment 1 was missed

- Moment 2 was missed
- Moment 3 was missed
- Moment 4 was missed
- No misses, Hand hygiene was performed as required

SUBMIT

A member of the blood collection team, performs hand hygiene, puts on gloves and begins to draw blood from a patient. When she is done, she removes the tourniquet. She takes off her gloves and throws them into the bin and proceeds to press the elevator button and goes to the 15th floor.

What moment was missed?

- Moment 1 was missed
- Moment 2 was missed

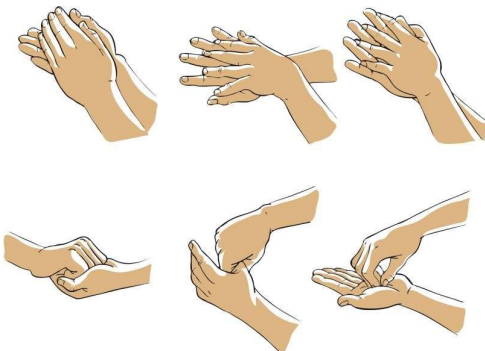
- Moment 3 was missed
- Moment 4 was missed
- No misses, Hand hygiene was performed as required

SUBMIT



Complete the 3 questions above before moving on.

Click on the picture(s) which represent adherence to the Grand River Hospital Policy in clinical areas:



Correct! This picture represents adherence to GRH Policy.



This picture does NOT represent adherence to GRH Policy. Long fingernails are not permitted.



This picture does NOT represent adherence to GRH Policy. Rings with stones are not permitted (only plain bands with no stones are allowed).

CONTINUE

Conclusion & References



Thank you for completing this e-learning course!

You may now close the course. Thank you!

References:

1. World Health Organization: <https://www.who.int/infection-prevention/en/>

2. [Public Health Agency of Canada]. <https://www.publichealthontario.ca/-/media/documents/bp-hand-hygiene.pdf?la=en>.Page 17
3. Public Health Ontario.Best Practices for Hand Hygiene in All Health Care Settings, 4th edition.
<https://www.publichealthontario.ca/-/media/documents/bp-hand-hygiene.pdf?la=en>.Page 22