

Hand Hygiene at HGH

Healthcare Associated Infections

- Healthcare Associated Infections (HCAIs) are infections occurring in a patient during the process of care in a hospital, other health care facility or by carers in the patients home which were not present or incubating at the time of admission to care.
- This includes infections acquired in the hospital but appearing after discharge.
- It also includes occupational infections among staff of the facility.
- In Canada, 1 in 9 patients in hospitals acquire healthcare associated infections during their hospital stay.
- More than 220,000 patients receiving care acquire healthcare associated infections in Canada every year resulting in 8,000 – 12,000 deaths.
- Studies have shown that healthcare workers are the most common vehicle for the transmission of microorganisms
- The good news is that by performing appropriate hand hygiene that infection rate can be reduced by 50%.

You personally can reduce the risk of a HCAI by 50%.

Not only that you can keep yourself safe.

- You are also susceptible to carrying around infectious organisms
- 80% of staff who dressed MRSA wounds carried the organism on their hands for 3 hours afterward, even though they wore gloves or used 'no-touch' techniques
- 60% of the hands of staff, within ½ hour of contact with patients with *Clostridium difficile* were contaminated without even touching the patient

So think back

- Any time within 3 hours of completing a dressing change on a patient or within ½ hour of making any contact in the room of a patient with *C. difficile*...?
 - Did you eat?
 - Did you have coffee?
 - Did you cough, rub your nose or eyes?
 - Did you approach and make contact with another patient, family member or colleague?
- If you performed hand hygiene properly then you don't have to worry If you didn't you are putting yourself and those around you at risk.
- **A simple habit that can save many lives including your own!!**

Hand Hygiene

- Hand hygiene is a general term referring to any action of hand cleansing. There are a couple of ways of accomplishing hand hygiene:
- **Alcohol based hand rub** which is the preferred method when there is no visible soiling on the hands and the patient is not infected with spore based pathogens such as *Clostridium Difficile* (C-Diff).
- **Liquid soap and water** which is required when hands are visibly soiled and in the presence of pathogens such as C-Diff. (if no handwashing sink is available, initial hand hygiene with alcohol hand rub is better than nothing, but liquid soap and water should be used as soon as possible to get rid of spores.)

Demo

As you read through the next couple of pages and go to the video I would like you to follow along with your own hands (without the rub or soap & water!!!).

We want to encourage you to perform hand hygiene in the most effective way we know of killing off contaminating agents so you need to get into the 'habit' of performing all the steps until it becomes second nature.

Lets review Alcohol based rubs

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



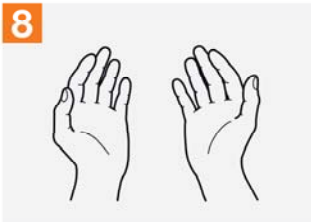
Rotational rubbing of left thumb clasped in right palm and vice versa;

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.

These 8 steps should take 20-30 seconds.

Now think about the last time you did hand hygiene at work. Did you complete those steps? You need to be 'mindful' when performing hand hygiene think about it ... not doing it right could cost your patient their life or you yourself could become ill .

Either paste the address below into your web browser or click on the '– you tube' to go to a video of the proper technique for using alcohol hand sanitizers.

https://www.youtube.com/watch?v=PG95ObDcR_s

[Alcohol based rubs – You Tube](https://www.youtube.com/watch?v=PG95ObDcR_s)

Lets Review ... Hand Washing

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB



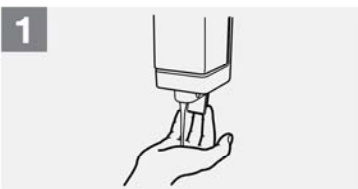
Duration of the entire procedure: 40-60 seconds

0



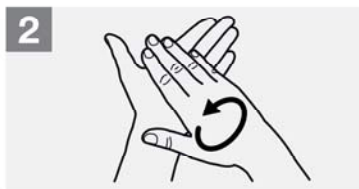
Wet hands with water;

1



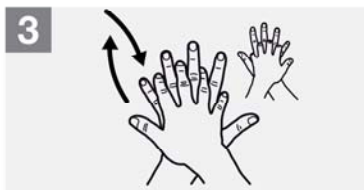
Apply enough soap to cover all hand surfaces;

2



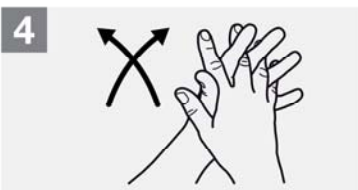
Rub hands palm to palm;

3



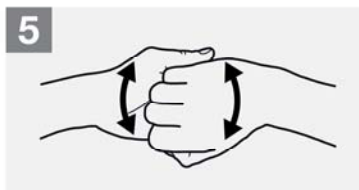
Right palm over left dorsum with interlaced fingers and vice versa;

4



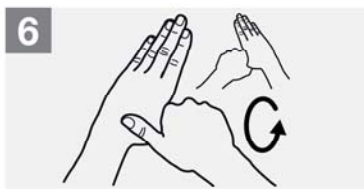
Palm to palm with fingers interlaced;

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



Rinse hands with water;

9



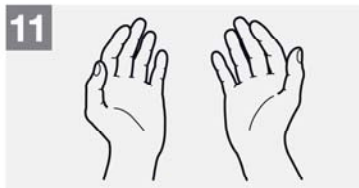
Dry hands thoroughly with a single use towel;

10



Use towel to turn off faucet;

11



Your hands are now safe.

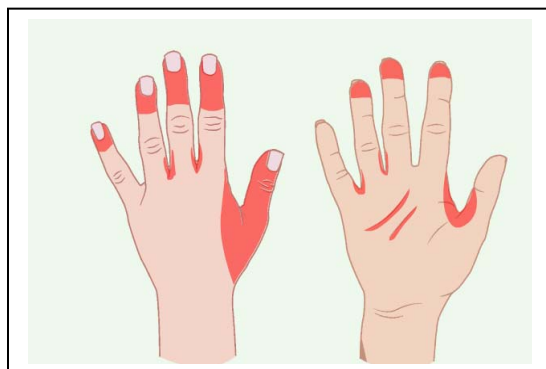
Either paste the address below into your web browser or click on the 'soap and water – you tube' to go to a video of the proper technique for handwashing

<https://www.youtube.com/watch?v=7ywfKi7d1eU>

[Soap and water - YouTube](https://www.youtube.com/watch?v=7ywfKi7d1eU)

Hand Hygiene Hints

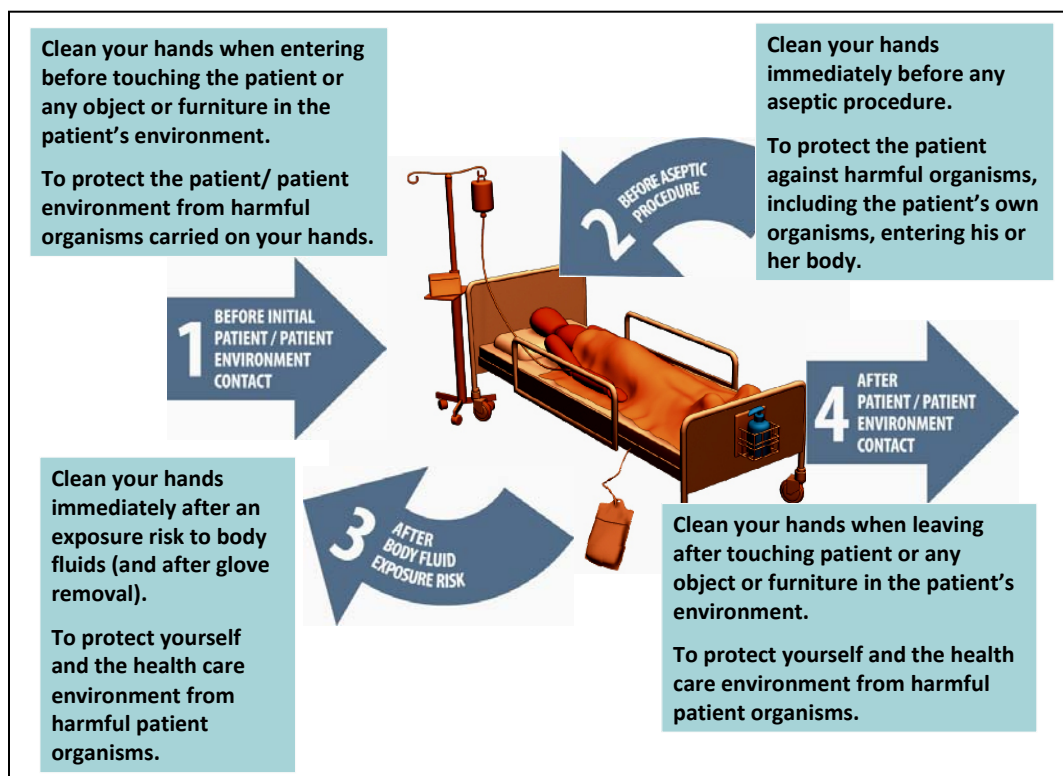
- There are a number of areas on your hands that are frequently missed during either form of hand hygiene. These areas are highlighted below.



Special attention to these areas during hand hygiene is extremely important as they are areas where bacteria frequently hide!!!

Four Moments for Hand Hygiene

- All hospital employees who have direct and indirect contact with patients and the patients environment are responsible for performing hand hygiene to prevent the spread of microorganisms.
- Hand hygiene provides protection for patients and healthcare workers from nearly all pathogens that are potentially spread by hands.
- The '4 Moments for Hand Hygiene' provides a series of indications to ensure that optimal hand hygiene is performed at the most important times when interacting with patients/clients.



Four Moments for Hand Hygiene

It is essential that you wash your hands:

1. Before initial patient or patient environment contact... ie before you enter the patients room or if you are caring for a patient in a curtained area, before you enter the area around the patient
2. Before an aseptic procedure Remember that 'aseptic' doesn't just mean sterile procedures ... it includes any procedure or task that could introduce bacteria to the patient, ie mouthcare, injecting into an IV line, an IM injection, taking down a dressing, giving medications.
 - Although many of us would apply gloves to do these procedures, hand washing is still required before putting gloves on.
3. After body fluid exposure / risk of body fluid exposure ie after accessing a body fluid site, emptying a catheter bag or suction container.
 - Hand hygiene is required immediately after actual or potential body fluid exposure and must take place before any hand-to-surface exposure, even within the same patient zone. This reduces the risk of contamination of yourself with infectious agents.
 - Hand hygiene at this point also reduces the risk of a transmission of micro-organisms from a 'colonised' to a 'clean' body site within the same patient.
 - Although many of us would apply gloves when risking exposure to body fluids, hand washing is still required after removing gloves.
4. After patient contact / patient environment contact ... ie after shaking hands, providing care on a specific site on the patient , adjusting monitor alarms, clearing the bedside table.
 - Again if you are wearing gloves for patient contact or patient environment contact, you are still required to perform hand hygiene after glove removal.

Gloves

Gloves are recommended for only two reasons:

1. To reduce the risk of contamination of health-care workers hands with blood and other body fluids.
2. To reduce the risk of dissemination of a contaminating agent (Bacteria, viruses, spores) to:
 - the environment
 - from the patient to the healthcare worker and vice versa
 - from one patient to another

Please Remember:

- Gloves DO NOT take the place of hand hygiene, nor do they alter or replace when hand hygiene should be performed.
- Gloves should be removed and hand hygiene performed when indicated by the 4 moments for hand hygiene and clean gloves put back on.
- Gloves should never be 'cleaned'.
- Gloves need to be changed between dirty and clean body site care in the same patient to prevent cross contamination.

Why

Why do I have to perform hand hygiene before putting on gloves? Aren't the gloves enough? It is a real pain to get gloves on when my hands are damp from the alcohol gel.

- Think about how warm and moist your hands can get inside gloves when you have them on for just a few minutes. That is exactly the environment that bacteria loves to grow in warm and moist.
- So if you have not performed hand hygiene before putting on the gloves your contaminated hands become even more contaminated because a perfect environment is being provided for the bacteria to multiply .
- A tear in the glove when providing care or taking the gloves off to do something else for your patient before doing hand hygiene can lead to increased risk of contamination of yourself and the patient.

Other Important Points Related to Hand Hygiene

- Contaminated surfaces or objects should not be touched after performing hand hygiene.
- Avoid touching your face, especially your eyes and nose.
- Artificial nails, gel nails or extenders are not to be worn by staff who have direct patient contact because
 - they are difficult to clean
 - they can harbour more bacteria than short nails
 - they can pierce gloves
- Fingernails should be kept short - no longer than ¼" long.
- Nail polish may be worn, but should be removed when chipped. Studies have indicated that nail polish more than 4 days old can harbour microorganisms that are not removed by hand hygiene.
- Use lotions that are compatible with hand hygiene products and gloves to minimize skin irritation that can occur with frequent hand hygiene.

Jewellery

- Rings and bracelets should not be worn by those with direct contact with patients.
- Jewellery is hard to clean, hides bacteria and viruses from the action of the hand hygiene agent and increases the risk of tears in gloves.
- If a watch is worn it must be pushed up above the wrist by staff caring for patients before performing hand hygiene.

Hand Hygiene Importance – Last Word ...

- If you work in a clinical setting, it seems like we are asking you to do an huge amount of hand hygiene when you consider how often you are in contact with the patient We realize that. It is possible that you may have to perform hand hygiene every 5 minutes that is almost 100 times in an 8 hour shift
- But think about it that is only 33 minutes total over a shift. If you were working with 5 sick patients today and I told you that there was a procedure that could save all 5 of your patients' lives and it only took 7 minutes to complete on each patient you would say it was a miracle.....

You can be that miracle !!!!