

1. FOCUS

The focus of this guideline is:

- To provide guidelines for hand hygiene within Fraser Health.
- To protect patients, residents, clients, staff, and visitors across all programs within Fraser Health from transmitting and/or acquiring infections by following appropriate hand hygiene practices.

2. BACKGROUND

- Hand hygiene is the single most important procedure for the prevention of infection and shall be practiced by all employees, contractors, physicians, students and volunteers
- The hands of healthcare workers are the most common mode of transmission of pathogens to patients, residents and clients
- In Canada, healthcare associated infections (HCAI) kill 8,000 to 12,000 people every year
- Global research indicates that hand hygiene improvements could potentially reduce HCAI rates by 30-50%
- Proper hand hygiene, when demonstrated by leaders, has been shown to positively influence the compliance of others by up to 70%
- Hand hygiene reduces the number of micro-organisms on the skin's surface
- There are many cited barriers to hand hygiene such as inaccessibility of hand hygiene stations and time constraints. However, it is the professional responsibility of all healthcare providers to perform hand hygiene before and after touching any patient, resident or client and/or their environment, as well as before aseptic procedure and after procedures that pose a blood/body fluid exposure risk, 100% of the time

The use of gloves does not replace the need for hand hygiene!

2.1 Staff

All healthcare providers across all programs within Fraser Health including employees, physicians, contractors, volunteers and students will perform hand hygiene before and after touching any patient,

resident or client and/or their environment, as well as, before aseptic procedures and after procedures that pose a blood/body fluid exposure risk.

Staff members that are unable to perform hand hygiene due to injury or skin conditions (e.g., eczema, psoriasis) must report to Workplace Health through the call center (1-866-922-9464) and either the Director of Care or Manager of his/her unit or department for consultation.

2.2 Patients, residents and clients hand hygiene

Patients/residents/clients will be assisted by staff members through educational guidance and support for how to perform adequate techniques in hand hygiene. Patients, residents and clients who are immobile, bed bound, and/or confused may require additional support from staff through provision of additional hand hygiene opportunities.

3. DEFINITIONS

Hand Hygiene Products

3.1 Alcohol Based Hand Rub (ABHR)

ABHR is an alcohol containing preparation (liquid, gel, or foam) at a concentration of at least 70% that inactivates micro-organisms and/or temporarily suppress their growth.

- ABHR should be available in all areas of the hospital
- ABHR should be used within the labeled expiry date as defined within the manufacturer's instructions
- ABHR should not be used in conjunction with water
- ABHR should not be placed adjacent to sinks
- ABHR is flammable and should not be placed above electrical outlets, heat sources, or other sources of ignition
- Pump containers must not be refilled to prevent contamination
- In settings where an ABHR may constitute a risk (cognitively impaired, pediatrics, psychiatry, substance abuse) the use or placement should be carefully considered

3.2 Plain Soap and Water

Plain soap is a detergent based product that emulsifies fat to improve the removal of organic material from the hands by rinsing with running water.

- Soap must be in a liquid form and be dispensed from a single-use disposable pump container
- Pump containers must not be refilled to prevent contamination
- Plain soap must be available above all sinks
- Bar soap is not an acceptable choice in healthcare facilities due to the ability to harbor micro-organisms

3.3 Antimicrobial Soap and Water

Antimicrobial soap contains an antiseptic agent at a concentration sufficient to inactivate micro-organisms and/or temporarily suppress their growth.

- Antimicrobial soap is to be used for surgical hand antisepsis prior to donning sterile gloves in areas where high risk procedures may be performed e.g. OR, ICU, Emergency, Labour and Delivery, etc.
- Antimicrobial soap must be available above surgical scrub sinks in high risk areas
- On entrance to the NICU, staff must wash to their elbows with antimicrobial soap and water
- Antimicrobial soap must be in a liquid form and be dispensed from a single-use disposable pump container
- Pump containers must not be refilled to prevent contamination
- Antimicrobial soap should be used within the labelled expiry date as defined within the manufacturer's instructions

Routine use of antimicrobial soap is not recommended due to:

- Risk of organisms developing resistance
- Frequent use can be harsh on hands and result in skin breakdown

Hand hygiene sinks shall be dedicated to that purpose and not used for any other purpose. Sinks used for cleaning of equipment, disposal of waste fluids (e.g. IV fluids, lipids, used antiseptics) shall not be used for hand hygiene.

Other non-alcohol based hand hygiene products have not been approved for use in health care settings.

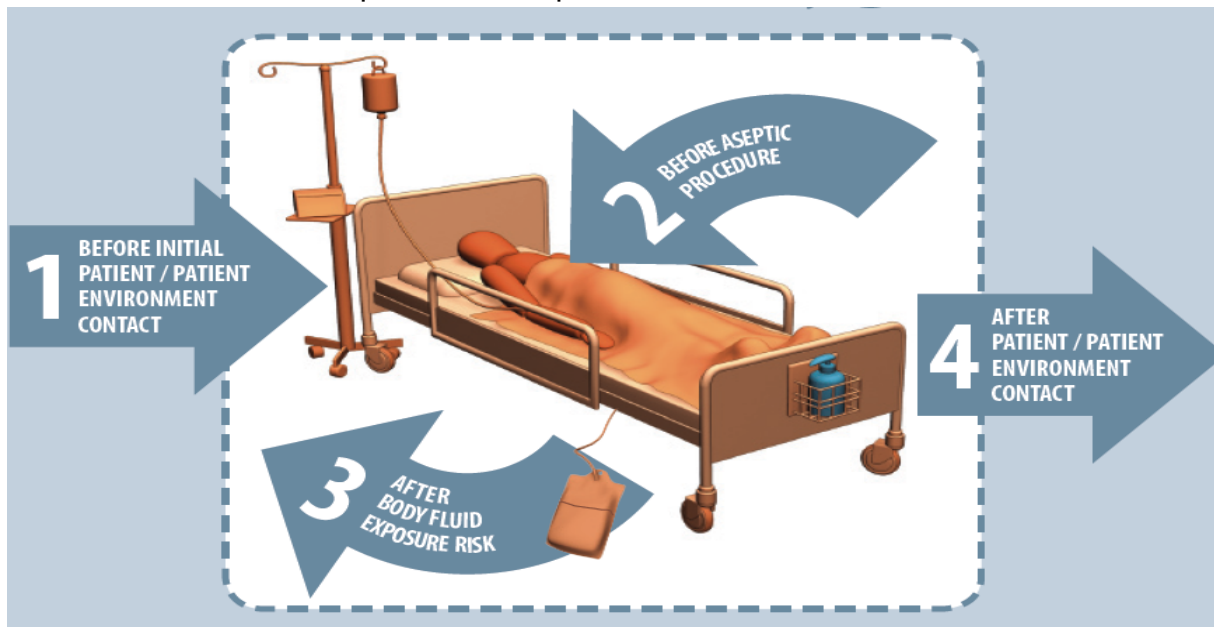
4. EXPECTED OUTCOMES

The expectation is that all staff will be compliant with hand hygiene 100% of the time.

5. ASSESSMENT

5.1 “Your 4 Moments for Hand Hygiene”

1. Before initial contact with a patient or the patient’s environment
2. Before clean or aseptic procedures
3. After a body fluid exposure risk (including diarrhea and vomitus, secretions, excretions)
4. After contact with a patient or the patient’s environment



5.2 Product Selection

Soap and Water IS REQUIRED

- When caring for patients with diarrhea and their environment (includes *Clostridium difficile* and Norovirus). If soap and water is not readily available, use ABHR and then wash hands with soap and water as soon as possible
- When hands are visibly soiled
- After 5 to 6 applications of an alcohol based hand rub to remove residual emollients

Alcohol Based Hand Rub (ABHR)

- Is quicker to use than using soap and water
- Can be used if no soap and water readily available when caring for patients with diarrhea and their environment, followed by a soap and water wash as soon as possible
- Is more readily available than sinks due to their inaccessible and infrequent locations
- Provides emollients which help reduce skin irritation
- Is effective in reducing micro-organisms on hands

5.3 Additional Indications for Hand Hygiene

- When arriving and leaving the work area
- Before and after using gloves. Gloves are not a substitute for hand hygiene
- Before preparing medications
- Immediately, if skin is broken or punctured
- Before handling food or drinks
- When moving from a contaminated body site to a clean body site during direct patient care
- After using the washroom
- When hands are visibly soiled
- After blowing your nose
- After smoking
- After contact with animals

When in doubt, perform hand hygiene!

5.4 Mandatory Requirements for Hand Hygiene

- Keep fingernails clean and short (less than 3 mm) with no artificial nails or extenders
- Do not wear chipped nail polish, as bacteria may become trapped along the edges
- Wear a minimum of hand jewelry and remove hand jewelry prior to performing hand hygiene

5.5 Caring for Your Hands

- Avoid using hot water. Repeated exposure to hot water may increase the risk of dermatitis
- Hand lotions or creams may be used to reduce the occurrence of contact dermatitis and must be compatible with other products used
- Soap and ABHR should not be used concurrently as it contributes to skin breakdown
- Staff must cover any open areas of skin with an occlusive dressing
- Report any significant skin breakdown to Workplace Health or direct report (e.g. Manager or Director of Care)

6. INTERVENTIONS

Procedure for Hand Hygiene

6.1 Hand Hygiene with Soap and Water

- Wet hands with water
- Apply an adequate amount of the appropriate soap
- Use friction to wash all surfaces of both hands, including web spaces, thumbs, wrists, and the back of the hands
- Rub nail beds against the opposite palm
- Wash for a at least 15-20 seconds
 - Exception: upon entrance to NICU, staff must wash hands and forearms to the level of the elbows for a minimum of 30 seconds using antimicrobial soap
- Rinse thoroughly with a steady flow of warm water
- Dry hands with clean paper towels
- Use paper towels to turn off taps
- Discard paper towel

6.2 Hand Hygiene with an Alcohol Based Hand Rub (ABHR)

- Apply a loonie size amount of ABHR in the palm of dry hands
- Spread the ABHR to cover all surfaces of both hands, including web spaces, thumbs, wrists, and the back of the hands
- Rub nail beds against the opposite palm
- Rub hands together for 15-20 seconds until dry

7. DOCUMENTATION

No documentation required.

8. EDUCATION

All health care providers will undertake and document hand hygiene education on an annual basis.

Hand hygiene education is to be completed on an annual basis and is available online:

- FH Pulse Page: [Internal FH hand hygiene module](#)
- FH external website for non- affiliates: External FH hand hygiene module
- Medical staff hand hygiene module: [Medical staff hand hygiene module](#)

Visitors, patients, residents and clients will be provided with educational guidance and support to adhere to the hand hygiene guideline. (Pamphlet available)

9. EVALUATION

All Fraser Health programs are required to monitor and report hand hygiene performance on a regular basis and education rates annually for staff and physicians through their program and Fraser Health Quality Committees. The Quality Committees will report the compliance and education rates through to the Board Quality Performance Committee.

Fraser Health has developed an audit process to provide guidance and tools to standardize the method of data collection. This information can found on the Fraser Health Pulse and the Fraser Health web-site.

CLINICAL PRACTICE GUIDELINE: Infection Control Hand Hygiene Practice Guideline

Acute Care IC4: 0100

Residential Care and Assisted Living IC5: 0200

AUTHORIZATION:
Vice President, Medicine

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Continuing education for auditors is required annually.

10. MONITORING

The audit process will be monitored by Infection Prevention and Control Practitioners through auditor evaluations.

11. REFERENCES

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12. APPENDICES

Appendix 1: Placement of Hand Hygiene Products

Appendix 2: 4 Moments Summary