

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 sufficient to inactivate 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

- 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 should be used within the labeled expiry date as defined within the manufacturer's instructions
- 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.

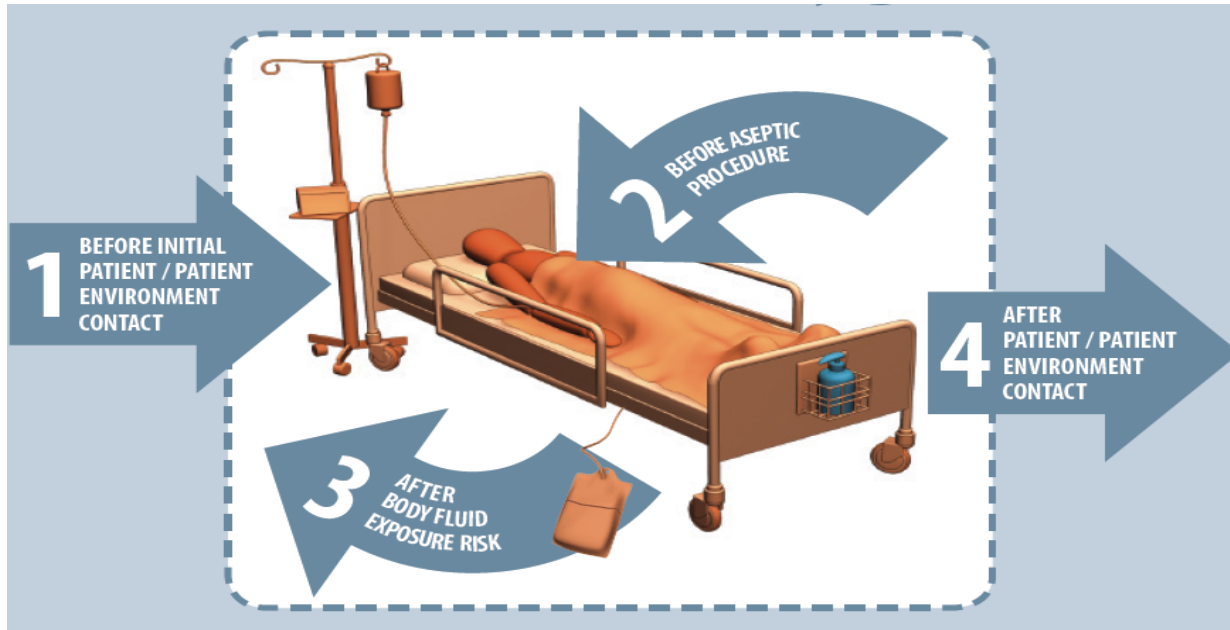
4. EXPECTED OUTCOMES

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
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)
- 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
- 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
- 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 to this timing, 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

Author(s): Fraser Health

CDST# :

NOTE: This is a controlled document for Fraser Health (FH) internal use only. FH accepts no responsibility for use outside of this health authority. The electronic version of this document in the Clinical Policy Office is the current version - any print versions should be checked against the electronic copy.



CLINICAL PRACTICE GUIDELINE: Infection Control Hand Hygiene Practice Guideline
Acute Care IC4: 0100
Residential Care and Assisted Living IC5: 0200

AUTHORIZATION:

Date Released:

Page 8 of 10

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 on the Fraser Health website <http://webi0001/handhygiene/>

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

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.

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

Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force October 25, 2002 / Vol. 51 / No. RR-16

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5116a1.htm>

Association for Professionals in Infection Control & Epidemiology Inc. (Oct. 2002). *Guideline for Hand Hygiene in Health Care Settings.*

Author(s): Fraser Health

CDST# :

NOTE: This is a controlled document for Fraser Health (FH) internal use only. FH accepts no responsibility for use outside of this health authority. The electronic version of this document in the Clinical Policy Office is the current version - any print versions should be checked against the electronic copy.

Feb 2011

CLINICAL PRACTICE GUIDELINE: Infection Control Hand Hygiene Practice Guideline
Acute Care IC4: 0100
Residential Care and Assisted Living IC5: 0200

AUTHORIZATION:

Date Released:

Page 9 of 10

Boyce, J. M., & Pittet, D. (2002). Morbidity and Mortality Weekly Report. *Guideline for Hand Hygiene in Health-Care Settings. Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force.* (51:1–45).

Canada Communicable Disease Report – Supplement. (December 1997). Infection Control Guidelines: Preventing Infections Associated with Indwelling Intravascular Access Devices. Vol. 23S8. Retrieved December 14, 2006 from http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/97vol23/23s8/iidh_e.html#rec

Canadian Patient Safety Institute (CPSI). *Fact Sheet 1: The need for better hand hygiene*

<http://www.handhygiene.ca/Fact%20Sheet%201%20Need%20For%20Better%20HH%2015Oct2007.pdf>

Canada, Health Canada. (July 1999). Infection Control Guidelines. Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care. Retrieved Aug 15, 2006 from <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/99pdf/cdr25s4e.pdf>

Center for Disease Control and Prevention (CDC). *Clean Hands Save Lives* (2008)

<http://www.cdc.gov/cleanhands/>

Center for Disease Control and Prevention (CDC). *Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings* (2007).

<http://www.cdc.gov/ncidod/dhqp/pdf/guidelines/Isolation2007.pdf>

Center for Disease Control and Prevention (CDC). Morbidity and Mortality Weekly Report. *Guideline for Hand Hygiene in Health-Care Settings Recommendations of the Healthcare Infection Control Practices*

Community and Hospital Infection Control Association – Canada. (2008) Position Statement on Hand Hygiene. Retrieved Feb 19, 2010 from <http://www.chica.org/pdf/handhygiene.pdf>

Institute for Healthcare Improvement. (April 2006). How-to guide: Improving hand hygiene. A guide for improving practices among health care workers. Retrieved Aug. 15, 2006 from

http://www.sheaonline.org/Assets/files/IHI_Hand_Hygiene.pdf

Hilburn J, Hammond BS, Fendler EJ, Groziak PA. *Use of alcohol hand sanitizer as an infection control strategy in an acute care facility.* Am J Infect Control. 2003 Apr; 31(2):109-16.

Kampf, G., Kramer, A. (2004). Epidemiologic Background of Hand Hygiene and Evaluation of the Most Important Agents for Scrubs and Rubs. *Clinical Microbiology Reviews*, 17(4):863-93.

Pittet D. *Improving compliance with hand hygiene in hospitals.* Infection Control and Hospital Epidemiology. 2000; 21(6):381-386.

Pittet D. *Improving adherence to hand hygiene practice: a multidisciplinary approach.* Emerg Infect Dis. 2001 Mar-Apr;7(2):234-40.

CLINICAL PRACTICE GUIDELINE: Infection Control Hand Hygiene Practice Guideline
Acute Care IC4: 0100
Residential Care and Assisted Living IC5: 0200

AUTHORIZATION:

Date Released:

Page 10 of 10

Provincial Infectious Diseases Advisory Committee (PIDAC). (2009) Best Practices for Hand Hygiene in All Healthcare Settings.

Provincial Infectious Diseases Advisory Committee (PIDAC). Ministry of Health and Long Term Care (2009). *Best Practices for Hand Hygiene in all Health care settings.*

http://www.health.gov.on.ca/english/providers/program/infectious/diseases/best_prac/bp_hh_20080501.pdf
 Public Health Agency of Canada (PHAC) *Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care.* Volume: 25S4 - July 1999
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/99vol25/25s4/>

United Kingdom National Patient Safety Agency. *Clean Your Hands Campaign* (2009)
<http://www.npsa.nhs.uk/cleanyourhands/>

World Health Organization (WHO) *FAQs: Hand Hygiene in Health Care* (2009)
<http://www.who.int/gpsc/tools/faqs/about/en/index.html>

World Health Organization (WHO) *The First Global Patient Safety Challenge: Clean care is Safer Care* (2009)
<http://www.who.int/gpsc/background/en/index.html>

World Health Organization (WHO). *WHO Guidelines on Hand Hygiene in Health Care. First Global Patient safety Challenge: Clean care is Safer Care* (2009)
http://whqlibdoc.who.int/publications/2009/9789241597906_eng.pdf

World Health Organization (WHO). *Save Lives: Clean Your Hands. Guide to Implementation: a guide to the Implementation of the WHO Multimodal Hand Hygiene Improvement Strategy.* (2009)
http://www.who.int/gpsc/5may/Guide_to_Implementation.pdf

12. APPENDICES

Appendix 1: Placement of Hand Hygiene Products

Appendix 2: 4 Moments Summary

Appendix 1

Placement of Hand Hygiene Products

Area	ABHR	Plain Soap	Antimicrobial Soap
*Entrances and exits	√		
Hand Wash Sinks		√	
Point Of Care	√		
**High risk areas	√		√
Dirty utility Room			√
Surgical scrub sinks			√

* Entrance and exits to facility, units, rooms, nursing stations, lounges, corridors, thoroughfares and public areas.

** High Risk Areas: Where high risk procedures (requiring the donning of sterile gloves) may be performed: e.g. OR, ICU, Emergency, Labour and Delivery.

4 Moments Summary

1	BEFORE PATIENT CONTACT	<p>When? When approaching - clean your hands before touching ✓ a patient ✓ any equipment, furniture or surface in their bed space</p> <p>Why? To protect the patient against harmful germs carried on your hands</p>
<p>Examples</p> <ul style="list-style-type: none"> Before courtesy/comfort gestures: greeting a patient by shaking their hand or comforting them by touching their arm or shoulder Before direct patient assistance with: dressing or undressing, personal hygiene, skin care, transfer to or from a chair or commode Before clinical examination: taking a patient's pulse or blood pressure, chest auscultation, abdominal palpation Before IV pump adjustment, silencing monitoring alarms, replenishing supplies, sitting at bedside 		
2	BEFORE AN ASEPTIC TASK	<p>When? Clean your hands immediately before any aseptic task (and before donning gloves)</p> <p>Why? To protect the patient against harmful germs, including the patient's own germs, entering his or her body</p>
<p>Examples</p> <ul style="list-style-type: none"> Before contact with mucous membranes: oral/dental care, giving eye drops, suctioning respiratory secretion Before contact with non-intact skin: skin lesions, wound care, any type of injection Before contact with medical devices: catheter insertions, opening a vascular access system or drainage system Before preparation of: medications, dressing sets, enteral feeds 		
3	AFTER BODY FLUID EXPOSURE RISK	<p>When? Clean your hands immediately after an exposure risk to body fluids (and after glove removal)</p> <p>Why? To protect yourself and the health-care environment from harmful patient germs</p>
<p>Examples</p> <ul style="list-style-type: none"> After contact with mucous membranes and with non-intact skin: as detailed above in 2 – <i>BEFORE AN ASEPTIC TASK</i> After contact with medical devices or clinical samples: drawing and manipulating any fluid sample, opening a drainage system, endotracheal tube insertion and removal After cleaning up of: urine faeces, vomit or other body fluids After handling waste: (bandages, sanitary napkins, incontinence pads), cleaning of contaminated and visibly-soiled areas or equipment (commodes, bedpans and urinals, K-basins, medical instruments, patient's bed, chair, over-bed or bedside table) 		
4	AFTER PATIENT CONTACT	<p>When? When leaving – clean your hands after touching ✓ a patient ✓ any equipment, furniture or surface in their bed space</p> <p>Why? To protect the patient against harmful germs, including the patient's own germs, entering his or her body</p>
<p>Examples</p> <ul style="list-style-type: none"> After courtesy and comfort gestures: touching or holding a patient's hand After directly assisting with: personal hygiene, ambulation or repositioning, transferring to or from a stretcher or wheelchair After clinical assessment: examining limbs or dressing sites, adjusting bed cloths and patient garments to assess signs & symptoms After contact with a bed rail, changing bed linen, touching or moving patient care equipment/furniture, sitting in the bedspace 		

Adapted from WHO "Your 5 Moments for Hand Hygiene" 2006

Your 4 Moments for Hand Hygiene A COMPONENT OF ROUTINE PRACTICES

