

15.0 Infection Control

15.1 Hand Hygiene Policy

1.0 Purpose

- To prevent patients, health care providers and visitors from transmitting and/or acquiring a healthcare associated infection through ensuring standardized hand hygiene practices within Island Health
- To strive for excellence in the health and safety of patients, health care providers and visitors within Island Health
- > To reduce the incidence of health-care associated infection within Island Health

2.0 Policy

2.1 All health care providers including, nurses, physicians, contracted services, volunteers, and students in clinical settings will perform hand hygiene at the closest point of care to the patient to minimize the risk of contamination of the hands prior to patient care.

The expectation is that all health care providers will be in compliance with this policy 100% of the time in non-emergency situations.

Hand Hygiene must be performed:

- > Before putting on and after removing any type of gloves
- Before putting on and after removing personal protective equipment (<u>Putting on PPE</u> and <u>Removing PPE</u>)
- At each of the "4 Moments for hand hygiene" as defined by the World Health Organization (Figure 1)
- > Before contact with a patient or patient's zone which is the area surrounding a patient. (Figure 2)
- Before carrying out an invasive or aseptic procedure
- After contact with blood or body fluids
- > After contact with a patient or patient's zone

Examples of when to carry out Hand Hygiene include:

- Before and after touching any apparatus or device on, or used by the patient
- Before and after touching any personal or bedside item (e.g. bedside tray)
- Before handling medication or food
- Between care and contact of different patients
- Before moving from a contaminated to clean body site during care of the same patient (e.g. urinary catheter to an intravenous line).

When a health care provider carries out hand hygiene and then touches a contaminated item, such as a medical chart or cellphone, hand hygiene should be repeated prior to touching the patient or anything within the patient's zone.



Figure 1: The Four Moments of Hand Hygiene



Figure 2: Patient Zones represented by multiple circles (for full description see definitions) Source: Dr. Y Longtin, "The 10 Obstacles to Hand Hygiene"

3.0 Principles

3.1 Rationale for Hand Hygiene policy:

- Hand hygiene is universally accepted as the single most important method for infection prevention and control
- The hands of health care providers are the most common mode of transmission of pathogens to patients
- In Canada, an estimated 220,000 health-care associated infections occur each year with approximately 8,000 deaths. Global research indicates that hand hygiene improvements could potentially reduce these health-care associated Infection rates by 30-50%.

3.2 The Island Health Hand Hygiene policy aims to:

- > Maintain a performance standard that will ensure patient, visitor and health care provider safety.
- > Enhance the quality of care received by a patient by decreasing the risk of acquiring a health-care associated infection.

4.0 Scope

This policy applies to all health care providers at Island Health, including staff, physicians, nurses, contracted services personnel, volunteers and students, working across the continuum of care.

All health care providers will be notified of this policy by Island Health at the time of hiring. In addition, all health care providers are <u>required</u> to complete the online provincial hand hygiene learning module. The requirements to complete hand hygiene education are as follows:

Physicians	Goal: At time of credentialing and each reappointment and every 3 years thereafter.
Direct Patient Care Staff	Goal: Staff working on units with compliance less than 59% over a one year period shall be required to successfully complete the provincial hand hygiene education module.
New Hires	On hire (orientation)
Volunteers	On hire (orientation)
Employed Student Nurses	On hire (orientation)
All Student Programs	Yearly

5.0 Procedures

5.1 Hand hygiene procedures are performed using either alcohol-based hand rub (ABHR) or soap and water at the closest point of patient care.

ABHR containing between 70%-90% alcohol is the preferred product of choice to routinely decontaminate hands which are **not visibly soiled** as it:

- > Rapidly and effectively kills most transient microorganisms;
- Is easily accessible and less time-consuming than washing with soap and water; and,
- Is gentler on skin and less drying than soap and water.

Utilize the first available method of hand hygiene. If hands are visibly soiled, cleaning with soap and water is the preferred method. Accessibility to ABHR at the point of care is required.

Technique for Hand Hygiene

All hand surfaces must be covered and rubbed vigorously for effective hand hygiene (see link for further instructions)

https://intranet.viha.ca/departments/mms/video/Pages/handwashing.aspx

ABHR

- > Apply enough product to palm of hand to cover all surfaces/areas of hands and wrists;
- When using an alcohol-based hand rub, apply sufficient product such that it will remain in contact with the hands for a minimum of 15 seconds before the product becomes dry.
- > Rub all surfaces/areas of the hands and fingers vigorously until hands are dry.

Soap and Water

- Wet hands with water;
- Apply one pump of soap to palms;
- Rub hands together vigorously, covering all surfaces/areas of hands, fingers and wrists until any soiled areas are removed;
- > When using soap and water, a minimum of 15 seconds of lathering is required before rinsing.
- Rinse hands with water and pat dry with a disposable towel;
- Turn off taps with paper towel, to avoid recontamination of the hands

5.2 Exceptions

In emergency situations, health care providers are encouraged to perform appropriate hand hygiene with ABHR before patient contact, and as soon as possible after the patient has been stabilized. No hand hygiene audits will take place during emergency situations.

5.3 Factors that may Influence the Effectiveness of Hand Hygiene Practice

5.3.1 Nails, Jewelry, Watches, Sleeves

In order to ensure best practices for Hand Hygiene, the following are strongly recommended:

> **Nails:** Keep clean, natural and short at all times.

The following may harbor micro-organisms and interfere with effective hand hygiene practices and therefore must not be worn or present:

- Long and/or chipped nails;
- Artificial nails, nail extensions, and nail jewelry;
- Nail polish.
- Hand/wrist jewelry, rings or watches: Remove when carrying out patient care
 - Jewelry/wrist watches may harbor the growth of micro-organisms and compromise effective hand hygiene
- > Sleeves: Keep out of the way during patient care activities;
 - o Long sleeves must be pulled up in order to complete proper hand hygiene;
 - Floppy sleeves may become contaminated and must not be worn.

5.3.2 Skin/Medical Conditions/Splints:

Health care providers that are unable to perform hand hygiene due to:

- > An injury which requires a hand splint, cast, dressing, or bandage etc. or,
- A skin condition (e.g. extensive cracks and bleeding from eczema, psoriasis, etc.), must immediately report these to their department manager and Occupational Health and Safety for consultation. If a health care provider is unable to perform effective hand hygiene, alternate, non-patient care, work arrangements need to be considered.

5.3.3 Glove Use:

The use of gloves is not a substitute for performing hand hygiene:

- Gloves must be changed between each patient contact;
- Gloves must be changed between performing contaminated and clean care procedures on the same patient (e.g. urinary catheter to an intravenous line); and
- > Hand hygiene must be performed before putting on and after taking off gloves.

5.4 Patient Hand Hygiene

All health care providers are encouraged to promote patient hand hygiene to assist in reducing the spread of infection.

- Health care providers should provide patients with educational guidance and support to perform hand hygiene. Patients who are immobile, bed bound and/or confused may require frequent support from staff to assist with hand hygiene either with soap and water or ABHR;
- Hand hygiene should be offered to all patients before each mealtime.

6.0 Definitions

Alcohol Based Hand Rub (ABHR): A liquid, gel or foam formulation of alcohol (e.g., ethanol, isopropanol) which is used to reduce the number of microorganisms on hands in clinical situations when the hands are not visibly soiled. ABHRs contain emollients to reduce skin irritation and are less time-consuming to use than washing with soap and water.

Hand Hygiene: A general term referring to the any hand cleaning practices which remove micro-organisms from the hands (which may or may not be visibly soiled).

Island Health Healthcare Providers: Include all clinicians, physicians, medical students, nurses, student nurses, volunteers, housekeeping staff, porters, lab and x-ray personnel, therapists, and all other individuals having direct contact with patients/clients/residents or their immediate environment.

Patient: An individual receiving care within an Island Health facility, or receiving home health care services from any Island Health employee. For the purpose of this policy this term includes residents and clients.

Patient Zone: The area surrounding a patient. The concept is related to the "geographical" visualization of the four key moments for hand hygiene. The zone contains the patient and his/her immediate surroundings. This typically includes the intact skin of the patient and all inanimate surfaces that are touched by or in direct physical contact with the patient such as the bed rails, bedside table, bed linen, infusion tubing and other medical equipment. It further contains surfaces frequently touched by health care providers while caring for the patient such as monitors, knobs and buttons, and other "high frequency" touch surfaces.

Personal Protective Equipment (PPE): Any specialized clothing or safety items (i.e. masks, gloves, gowns) worn by individuals prior to contact with potential or identified hazards, such as from direct exposure to blood and/or body fluids, or pathogens.

Point of Care: The place where three elements occur together: the patient, the healthcare provider and care or treatment involving patient contact.

Visibly soiled hands: Hands on which dirt or body fluids can be seen.

7.0 References

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