

Infection Prevention and Control Recommendations for Hand Hygiene in all Healthcare Settings

Purpose:

These practice recommendations are intended to protect patients/residents/clients and healthcare workers (HCWs) by ensuring that high quality hand hygiene practices are followed. Optimal hand hygiene is a key component of a culture of safety and is associated with the reduced transmission of micro-organisms responsible for healthcare-associated infections (HAIs). The recommendations outlined in this document reflect the minimum provincial expectations for hand hygiene programming in all healthcare settings. Hand hygiene policies developed by Regional Health Authorities (RHAs) and/or RHA-contracted facilities that exceed the minimum provincial expectations and/or contain stronger language will supersede this document.

Scope:

These practice recommendations apply to all persons employed by Saskatchewan Regional Health Authorities (RHAs), or Saskatchewan RHA-funded/contracted facilities, as well as members of their medical staff, volunteers, board members, students and others associated through contracts.

- * **Direct care staff:** All staff who have direct contact with patients/residents/clients, their surroundings, equipment/supplies, medication, food, and/or blood and body fluids.
- ** **Non-direct care staff:** All staff who do not have direct contact with patients/residents/clients, their surroundings, equipment/supplies, medication, food, and/or blood and body fluids.

Responsibility:

All Saskatchewan *direct and **non-direct care staff members are responsible for ensuring and demonstrating their commitment to patient/resident/client safety through performing hand hygiene with soap and water or alcohol-based hand rub (ABHR) when indicated. Hand hygiene is a shared responsibility. HCWs will be supported to encourage one another to perform hand hygiene in accordance with their regional policies.

Recommendations:

1. Policies:

All Regional Health Authorities (RHAs) in Saskatchewan will have a hand hygiene policy and procedure that complies with current Accreditation Canada standards. The policy and procedure should incorporate the principles listed below.

2. Principles:

2.1. Hand Care and Adornments

2.1.1. Skin Integrity

- Open cuts or sores on hands/wrists should be covered with waterproof bandages.
- Healthcare-approved hand lotion is recommended to prevent skin dryness and dermatitis, which can lead to skin breakdown from frequent hand hygiene and glove use.

- Occupational Health and Safety (OH&S) / Employee Health and Wellness (EH&W) departments should be contacted for guidance regarding any HCWs who are unable to perform hand hygiene in accordance with their regional policy (e.g. dermatitis, skin sensitivities, splints, casts, bandages).

2.1.2. Nails and Nail Polish

- To enable effective hand hygiene, natural nails should be kept clean and short (i.e. not extending beyond the tip of the finger).
- Artificial nails, nail polish, and nail enhancements should not be worn by *direct care staff.
- It is highly recommended that this also applies to **non-direct care staff (e.g. administrative, leadership roles), as these positions should provide support and role-model appropriate safety behaviour and/or may need to respond to a clinical need.

2.1.3. Hand and Arm Adornments

- It is highly recommended that rings or other hand adornments (e.g. dermal piercings) not be worn by *direct care staff. If the RHA policy allows HCWs to wear hand jewellery, it should be limited to plain bands without projections or mounted stones.
- A watch or medical alert bracelet, if worn, should not be manipulated or touched during patient/resident/client care, and should be removed or pushed up above the wrist before performing hand hygiene.
- It is highly recommended that this also applies to **non-direct care staff (e.g. administrative, leadership roles), as these positions should provide support and role-model appropriate safety behaviour and/or may need to respond to a clinical need.

2.1.4. Gloves

- Gloves should not be used in place of proper hand hygiene. Hand hygiene must be performed prior to accessing glove boxes and after glove removal.

2.2. Hand Hygiene Products

- Only products approved by the RHA or 3sHealth are to be used for hand hygiene.
- Plain soap, antimicrobial soap, and ABHR must be purchased in disposable, closed system containers that do not allow for “topping up” or refilling of the product.
- Soap must be liquid or foam. Bar soaps are not acceptable in healthcare settings†.
- Antimicrobial soap may be used in critical care areas such as ICU, or in other areas where invasive procedures are performed (e.g. surgery).
- Hand hygiene products must be clearly labeled and used prior to the expiry date.
- For maximum compliance, ABHR must be available at point-of-care (i.e. the place where three elements occur together: the client/patient/resident; the health care provider; and care or treatment involving client/patient/resident contact).
- Only hand lotion and gloves that are compatible with the RHA/3sHealth approved soap and ABHR should be used.
- ABHR must have an alcohol concentration of at least 70% to be deemed appropriate for health care use.

†With the exception of designated personal use by LTC residents.

2.3. Education and Training

- All staff/physicians/volunteers should, at minimum, receive education and training on hand hygiene and the hand hygiene policies and procedures upon initial orientation and on an annual/regular basis.
- Education regarding the importance of hand hygiene must be provided to the patient/resident/client. HCWs are to teach the patients/residents/clients and their families/visitors how to perform hand hygiene according to the 4 Moments for Hand Hygiene (see 2.5) and assist those who cannot perform hand hygiene independently.

NOTE: All education provided to the patient/resident/client and their family should be documented in their chart.

2.4. Physical Infrastructure

- All RHAs should ensure appropriate infrastructure is in place to support hand hygiene programming. In addition, RHAs are expected to follow current Canadian Standards Association (CSA) standards (Z8000) when constructing new builds or renovating existing healthcare facilities.
- Wall-mounted ABHR dispensers must be installed, and stock ABHR must be stored, as per provincial Fire Code Regulations.^{16,17}

2.5. Evaluation and Reporting

- Research has shown that audits improve hand hygiene compliance, resulting in decreased infection rates. Hand hygiene compliance for all HCWs, volunteers and patients/residents/clients should be monitored by trained observers on a regular basis.
- Ideally the observers should be external to the unit/facility that is being monitored to decrease the potential for bias. In addition, the RHA may choose to conduct blind audits (i.e. participants are not aware they are being observed), as this has been shown to be more representative of true hand hygiene compliance.
- Compliance is measured based on the 4 Moments for Hand Hygiene:
 - 1) Before contact with patient/resident/client and/or their environment
 - 2) Before aseptic procedures
 - 3) After body fluid exposure and/or exposure risk
 - 4) After contact with patient/resident/client and/or their environment
- The frequency of audits and the number of observations per audit may be determined by the RHA, based on available resources. However, there are published recommendations for sampling and reporting from the Canadian Patient Safety Institute (CPSI)⁸ and the BC Patient Safety and Quality Council.¹⁹
- Audit results should be communicated back to all stakeholders (e.g. posted to infection control boards, forwarded to senior leadership team, discussed during wall walks, etc.) in order to inform potential hand hygiene improvement initiatives.

2.6. Accountability and Quality Assurance

- It is strongly recommended that the RHAs develop and follow an accountability and quality assurance plan for hand hygiene compliance.

EXAMPLE: Facility/Unit managers shall submit a Hand Hygiene Action Plan to senior leadership addressing required quality improvements in all sites with less than 80% hand hygiene compliance in the previous fiscal year.

3. Procedures:

3.1. Hand hygiene with Alcohol-Based Hand Rub (ABHR)

- 1) Ensure hands are visibly clean (if soiled, follow hand washing steps)
- 2) Apply 1-2 full pumps of product (1" or 3 cm diameter), onto one palm
- 3) Briskly rub hands together in a regular washing motion (i.e. between fingers, around nails and on the back of hands)
- 4) Rub hands until product is dry. This will take a minimum of 15-20 seconds if sufficient product is used.

NOTE: Hands must be fully dry before touching the patient /resident/client or their environment for the hand rub to be effective and to eliminate the risk of flammability in the presence of an oxygen-enriched environment. ABHR must also be dry before donning gloves to prevent skin breakdown.

3.2. Hand washing with soap and water

- 1) Wet hands with warm (not hot) water
- 2) Apply soap and vigorously lather all surfaces of hands for 15-20 seconds
- 3) Rinse soap from hands
- 4) Dry hands using a paper towel
- 5) Use paper towel to turn off taps

NOTE: ABHR is the preferred method of hand hygiene. However, soap and water should be used when hands are visibly soiled and/or when caring for patients/residents/clients with a diarrheal illness, including those with suspected or confirmed *Clostridium difficile* infection or Norovirus.

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