Introduction

Hand hygiene education, training and auditing is an essential practice, also known as a Required Organizational Practice (ROP), integrated within the standards as defined by Accreditation Canada. As an integral part of routine practices, hand hygiene is the most important thing all healthcare workers (HCWs) within SHR can do to decrease healthcare-associated infections. Hand hygiene protects healthcare workers, clients, family and visitors.

The four moments of hand hygiene provides guidance to HCWs involved in direct client care. However, hand contamination is not limited to employees involved in direct client care. All objects, surfaces and persons have the potential to be contaminated by microorganisms that can lead to adverse outcomes. Once hands are contaminated they can transfer organisms between clients, other HCWs and/or environmental surfaces.

Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Alcohol-based hand rub (ABHR)</td>
<td>Also known as hand sanitizer - A liquid, gel or foam formulation with a minimum 70% alcohol used to reduce the number of microorganisms on hands 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.</td>
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<tr>
<td>Client environment</td>
<td>Any place where contact with a client occurs or has the potential to occur (i.e., hospital, clinic, home, long term care facility, waiting room, etc.).</td>
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<tr>
<td>Contamination</td>
<td>The presence of a substance on hands or on a surface (i.e. clothing, gowns, gloves, bedding, toys, surgical instruments, hand rails, elevator buttons, computer key boards, telephones, client care equipment) where their presence is unintended or undesirable.</td>
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<tr>
<td>Emollient</td>
<td>Softening and smoothing, especially to the skin.</td>
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<td>High risk for infection</td>
<td>A client who has an increased risk for developing an infection due to illness, procedure, syndrome, disability, treatment or age.</td>
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Transient organisms are not part of your normal flora and are unable to remain in the body for extended periods of time due to: competition from resident microbes, elimination by the body’s immune system and physical or chemical changes within the body that discourage the growth of transient.

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

**Purpose**

1. To reduce transmission of organisms to others and protect our clients, staff and visitors from illness.

**Policy**

1. If hands are not visibly soiled, perform hand hygiene with alcohol-based hand rub (ABHR) as the preferred method of hand hygiene

2. Circumstances when hands must be cleansed thoroughly with liquid hand soap and water:
   - When ABHR is not available
   - When hands are visibly soiled
   - When a client has diarrhea of unknown cause
   - When a client has *Clostridium difficile*
   - When performing an invasive procedure (i.e., when placing a central intravascular catheter, injecting into the spinal canal or subdural spaces, inserting urinary catheter etc.)

3. In healthcare settings, there are four moments to perform hand hygiene:
   - Before initial client/client environment contact (Moment 1)
   - Before aseptic procedures (i.e., insertion of IVs, dressing changes, insertion of urinary catheters, handling medications, etc.) (Moment 2)
   - After body fluid exposure (Moment 3)
   - After client/client environment contact (Moment 4)

4. All employees of the SHR must perform hand hygiene:
   - Upon arrival and departure from a facility/unit.
   - Before donning gloves
   - After removing gloves
   - After removing PPE (20-150 Personal Protective Equipment)
   - Before preparing/administering medications
   - Before eating, preparing or serving food, and assisting at mealtime.
   - Before and after group activities (i.e., crafts, exercises, cooking, etc.)
   - After performing personal functions (i.e., blowing your nose, using the toilet, etc.)
   - After coughing or sneezing (20-95 Respiratory Hygiene and Cough Etiquette)
   - After the handling of garbage, soiled linens, waste, etc.
   - Before and after repairing/servicing client equipment

5. Factors that may influence the effectiveness of hand hygiene practice. In order to ensure best practices for Hand Hygiene, the following are strongly recommended: (See SHR policy 7311-30-013)
   - Nails:
     - Keep nails clean, natural and short at all times.
Artificial nails, nail extensions, nail polish or shellac and nail jewelry may harbor micro-organisms and interfere with effective hand hygiene practices and are therefore not allowed in direct client care settings.

- Hand and wrist jewelry, rings and watches:
  - Jewelry such as rings and wrist watches may harbor the growth of microorganisms and compromise effective hand hygiene

6. Client hand hygiene
- All healthcare providers are encouraged to promote client hand hygiene to assist in reducing the spread of infection.
- Healthcare providers should provide clients with educational guidance and support to perform hand hygiene. Clients 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 clients before each mealtime.
- Hand hygiene should be offered/performed after personal hygiene activities such as toileting or after performing respiratory hygiene (coughing/sneezing or using a tissue).

Procedure

1. Sanitize your hands with ABHR (minimum 70%) per Job Instruction Breakdown (JIB) 0001:

   1. **Apply hand sanitizer**
   - enough to cover hands (approximately 1 – 2 pumps)

   *Hands must be dry, as wet hands dilute the product

   2. **Scrub palm to palm**
   3. **Palm to back**
   4. **Thumbs**
   5. **Between fingers**
   6. **Knuckles to palm**
   7. **Fingertips**

   **Your hands are clean!**

   **Step 1:** Apply product
   - enough to cover hands (approximately 1 – 2 pumps)

   *Hands must be dry, as wet hands dilute the product

   **Step 2:** Rub hands
   - Palm to palm
   - Palm to back
Step 3: Rub fingers
- Starting with your thumbs
- Then interlocking fingers
- Knuckles to palm
- And finally fingertips

*Remember to rub for 15 full seconds. Rub hands until the product is completely dry
*Do not rinse

2. Wash your hands with soap and water per Job Instruction Breakdown (JIB)0002:

Step 1: Wet hands with warm water

Step 2: Apply product

Step 3: Rub hands
- Palm to palm
- Palm to back

Step 4: Rub fingers
- Starting with your thumbs
- Then interlocking fingers
- Knuckles to palm
- And finally fingertips

Step 5: Rinse and dry well
- Use single use disposable towels
- Turn taps off with the paper towel
- Air dryers are not recommended in healthcare settings

*Hands must be dried thoroughly as moist hands spread more germs than dry hands
**Products**

1. **ABHR (minimum 70%)**
   - Is superior to soap and water in killing microorganisms from the skin and is an effective alternative to handwashing.
   - Reduces the number of resident skin flora in addition to transient organisms.
   - Is recommended for routinely cleansing hands if hands are not visibly soiled.
   - Is acceptable in liquid, foam or gel form.
   - Containers of ABHR shall not be “topped up” (added to) when product is running low. A new container shall be provided to avoid contamination.

2. **Regular hand soap**
   - Reduces transient microorganisms on the hands.
   - Is acceptable in foam, liquid and powder forms.
   - Is recommended for routine hand washing in all areas of the healthcare facility other than critical care areas and areas where invasive procedures are performed.
   - Containers of hand soap must not be “topped up” (added to) when product is running low. A new container shall be provided to avoid contamination.

3. **Antimicrobial soap**
   - Removes the majority of transient flora by its mechanical detergent action, and exerts sustained antimicrobial activity on resident hand flora.
   - Is recommended for washing hands in critical care areas and where invasive procedures are performed.
   - Is acceptable in foam or liquid form.
   - Containers of antimicrobial soap shall not be “topped up” (added to) when product is running low. A new container shall be provided to avoid contamination.

4. **Hand Lotion**
   - Is recommended to ease the dryness resulting from frequent hand cleaning.
   - Application of lotion can reduce the dispersal of bacteria.
   - Containers of hand lotion must not be “topped up” (added to) when product is running low. A new container shall be provided to avoid contamination.
   - The hand lotion used must be compatible with the alcohol-based hand rub, soap and gloves. Lotions that contain petroleum or other oil emollients may affect the integrity of gloves.

**References**


4. ROUTINE PRACTICES AND ADDITIONAL PRECAUTIONS FOR PREVENTING THE TRANSMISSION OF INFECTION IN HEALTHCARE SETTINGS. Protecting Canadians from Illness. PHAC 2012


