Provincial Hand Hygiene Campaign 2012

Clean Hands Across the Land
Overview

- Welcome/Introduction
- History
- Hand Hygiene: the basics
  - Definitions
  - Technique
  - Monitoring
- Hand Hygiene in the Schools
- Hand Hygiene in the Community
Florence Nightingale 1820-1907

- Promoted cleanliness and antiseptic techniques to the field of nursing during Crimean War
- Meticulous about collecting and interpreting data
- Founded the Nightingale School for Nurses, 1st nursing school in the world

Published in 1863
The very first requirement in a hospital is that it should do the sick no harm.
IGNAZ Philipp Semmelweis
Austria

Noticed death rates higher in maternity wards Staffed by medical students than in those attended by midwives
Intervention

May 1847

Students and doctors were required to:

clean their hands with a chlorinated lime solution when entering the labour room

in particular when moving from the autopsy to the labour room
Maternal mortality rates, 
First and Second Obstetrics Clinics, 
GENERAL HOSPITAL OF VIENNA, 1841-1850

Intervention
May 15, 1847

Medical Students
Midwives

Semmelweis IP, 1861
Why Hand Hygiene Now?...

- Healthcare-associated infections (HAIs)
  - Affects millions of patients worldwide every year
    - More serious illness
    - Prolonged hospital stays
  - Canada (2003)
    - HAIs cause 250,000 infections
    - 8000-12,000 deaths each year
    - $1 billion is spent to treat these infections
    - 50% preventable
World Health Organization

- Hand Hygiene single most important way to prevent HAI infections
- 1st Challenge:
  - Clean Care is Safer Care
  - Improve hand hygiene
Canada’s Role
Information about Hand Hygiene

2012 HAND HYGIENE INITIATIVES

World Health Organization

On May 5, 2012 show your healthcare facility’s commitment to improving hand hygiene by joining WHO in this global campaign. Find more information on WHO activities and tools available to support you HERE.

Not registered? Register HERE. Once registered, prepare your action plans and involve staff and health-care facility leaders in plans to improve hand hygiene.

WHO template actions plans are available HERE.

Canadian Patient Safety Institute

Improve hand hygiene practices and compliance in your organization by participating in Canada’s Hand Hygiene Challenge! Use the tools and resources you find HERE to implement this important patient safety and quality improvement program.

More information and the results of the Stick it to Hand Hygiene sticker contest may be found HERE.

Hand Hygiene Recommendations for Remote and Isolated Community Settings

Updated January 2010
Hand Hygiene: the basics

- Hands are the most common vehicle of transmission in healthcare facilities
- What is Hand Hygiene?
- Terms to know
- Resident vs. Transient microorganisms
- 4 Moments
- Techniques and skin care
- Overcoming barriers to hand hygiene
What is Hand Hygiene?

- New terminology
- More comprehensive
  - Hand washing
  - Hand antisepsis
  - Actions taken to maintain healthy hands and fingernails
- Point of Care
Terms to know!

- **Hand washing**
  - Process for removing soil and transient organisms
    - Soap and water
- **Hand antisepsis**
  - Removal or destruction of resident and transient organisms using an antiseptic agent
    - Rubbing hands with alcohol
    - Hand washing with antiseptic soap
  - Other terms used
    - Antiseptic hand wash
    - Antiseptic hand-rubbing
    - Hand decontamination
    - Hand disinfection
Point-of-Care

- Three elements occur together
  - The patient
  - The healthcare worker
  - The location where care or treatment involving patient contact occurs
- Hand hygiene products must be available at the point-of-care

Sink is here!
<table>
<thead>
<tr>
<th>Resident Flora</th>
<th>Transient Flora</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Normally live in layers of the skin</td>
<td>• Picked up by contact with equipment, patients, or the environment</td>
</tr>
<tr>
<td>• Coag. Neg staph, diptheroids</td>
<td>• Most frequently associated with HAI’s</td>
</tr>
<tr>
<td>• Not easily removed by routine hand washing</td>
<td>• Easily removed by hand hygiene</td>
</tr>
<tr>
<td>• May be killed or inhibited by hand hygiene product with antimicrobials (ABHR’s)</td>
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</table>
4 Moments for Hand Hygiene

1. BEFORE INITIAL PATIENT / PATIENT ENVIRONMENT CONTACT

2. BEFORE ASEPTIC PROCEDURE

3. AFTER BODY FLUID EXPOSURE RISK

4. AFTER PATIENT / PATIENT ENVIRONMENT CONTACT
BEFORE initial patient or patient environment contact

When?
- Before touching the patient
- Before touching any objects or surfaces in the patient's environment

Why?
- To protect patients from harmful, transient bacteria on your hands
BEFORE aseptic procedures

When?
- Clean your hands immediately before any aseptic procedures
- Immediately before donning gloves

Why?
- To protect against harmful bacteria from entering the body through wounds, catheters, IV’s, etc
AFTER body fluid exposure risk

When?
- Immediately after an exposure risk to body fluids
- Immediately after removing gloves

Why?
- To protect yourself and the healthcare environment from harmful bacteria in body fluids
AFTER patient or patient environment contact

When?
- Clean your hands after touching the patient or patient’s environment

Why?
- To protect yourself and the healthcare environment from harmful patient bacteria
Hand Hygiene Techniques

• Using an Alcohol-Based Hand Rub (ABHR)

• Washing with soap and water
Using ABHR

• ABHR is the preferred method of hand hygiene in all healthcare settings
• Alcohol minimum content 70-90%
• If no alcohol content – should not be used in healthcare
• Three types
  • Gels
  • Rinses
  • Foam
• Hands must be dry and not be visibly soiled
• Flammable – store according to fire regulations
• Supervise children with use of product
Using An ABHR

• 1-2 pumps to palm of dry hand

• Rub hands together covering hands, wrists and fingers

• Rub all surfaces (thumbs, between fingers etc) until hands completely dry

• Takes 15 seconds
How to wash your hands

Wash whenever hands are visibly dirty!

1. Wet Hands
2. Apply Soap
3. Rub All Surfaces
4. Rinse
5. Dry
6. Turn Off Tap With Paper Towel

Lather with soap and cover all surfaces of hands, wrists and fingers.
Care of the hands

- Hand hygiene includes good skin care as well!
- Ensure hands are completely dry before donning gloves
- In healthcare, it is recommended that ABHR be used - soap and water can strip the skin of natural oils and lead to irritation
- Moisturize regularly with lotion

Causes of dermatitis:
- Using water that is too hot
- Applying soap to dry hands
- Low humidity (winter)
- Quality of paper towels
Responsibilities of HCWs

- Participate in hand hygiene education and training
- Adhere to indications/techniques
- Follow organization recommendations for the management of dermatitis
- When providing direct patient care:
  - Do not wear hand jewelry
  - Do not wear artificial fingernails, fingernail enhancements or extenders
  - Keep nails short and do not wear chipped nail polish
Barriers to hand hygiene

- Lack of active participation in the promotion of hand hygiene at the individual or institutional level
- Lack of institutional priority
- Lack of administrative sanction for non-compliers or reward for compliers
- Absence of a climate/culture of safety which demands personal accountability of HCW’s
Barriers: Individual

- Perception that hands are not contaminated
- Lack of time
- Availability of ABHR’s or sinks
- Peer behaviours
- Wearing of jewelry
- Belief that glove use mitigates the need for hand hygiene
Accreditation Canada

**Standard:**
- The organization implements a comprehensive hand hygiene strategy

**Required Organizational Practices:**
- The organization delivers hand hygiene education and training for staff, service providers and volunteers
- The organization evaluates its compliance with accepted hand hygiene practices
Monitoring

- Direct observation must use a consistent approach and validated tool.
- The observer must be familiar with the methods and tools and must be trained to distinguish the indications for hand hygiene at the point of care.
- The observer must conduct observations openly without interfering with the ongoing work and keep the identity of the health care providers confidential.
- Compliance is indicated according to the 4 Moments for Hand Hygiene.
CHICA-Canada Audit Tool

### INFECTION PREVENTION AND CONTROL AUDIT for Hand Hygiene Practice

Name of Facility:

<table>
<thead>
<tr>
<th>Location: _______________</th>
<th>Date: YYYY MM DD</th>
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</thead>
<tbody>
<tr>
<td>Time: ______ hours / ___ AM ___ PM</td>
<td>Manager: ____________________</td>
</tr>
<tr>
<td>Auditor (print): __________</td>
<td>Signature: ____________________</td>
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**NOTES:**

A. This audit tool is an adjunct to hand hygiene practice and is not intended to replace provincial hand hygiene compliance audit tools.

B. Hand hygiene is performed by using either an alcohol-based hand rub (ABHR) or soap and water.

C. Gloves should not be a substitute for hand hygiene.

D. Soap and water is theoretically more effective in removing spores than alcohol-based hand rub. When a dedicated handwashing sink is immediately available, hands should be washed.
Jumping barriers

- Hand hygiene audits that demonstrate compliance at an individual, unit, or institutional level
- Education: New hire orientation, one-on-one, initiatives of PHAC, CPSI, etc., observation, posters, public awareness
- Engaging staff and families to request clean hands
- Institutional culture: safety, policy, accountability
- Positive deviance: engaging staff to create their own solutions
Hand Washing Related Outcomes in K-9 Health Curriculum
Curriculum Outcomes

• Health K-9 currently being renewed;
  • K, 1, 2 and 9 have been implemented since 2007
• Elementary and Intermediate Health to be renewed in the coming years.
• The new curriculum has a focus on “Healthy Body/Body Awareness” as one of the four units.
Curriculum

- The outcomes focus on knowledge, skill development, and attitudes and behaviours.
- The primary curriculum focuses on personal hygiene and more specifically hand washing.
  - Cold/flu prevention in relation to hand washing.
Elementary Curriculum

• The elementary curriculum expands the notion of hand washing to the greater community and the responsibility we each have.
  • Food preparation
  • Shared responsibility for health of community
  • Knowledgeable about transmission of germs.
Resources

- Authorized curriculum resources support hand washing messages in both visuals and in text.
- Student texts provide a linkage between home and school.
- Teachers reinforce the daily routine and the importance of hand washing.
Provincial Initiatives

- Public Health Nurse with responsibilities in schools.
- Hand Sanitizer Stations
- Poster Campaign
- [www.livinghealthyschools.com](http://www.livinghealthyschools.com) as a means of schools accessing school health information (HSHS)
Public Health

• Hand hygiene is important across the continuum
• Across all health care sectors especially Community Health
• Where three elements occur together: the client/patient/resident, the health care provider and care or treatment involving client/patient/resident contact.
• Environment of the Client/Patient/Resident
• Includes in a home or school, the client/patient/resident environment
Hand Hygiene Practices Between Clients

- Principles same, environment different for each client
- Mostly use alcohol based rub for home visits
- Pump soap and water with a clean towel for each visit
- Should perform hand hygiene at the appropriate moment of care
- ABHRs needs to be located at point-of-care,
- Products should be accessible without leaving the client/patient/resident
Challenges to hand hygiene in the community

- At home patient care can be fatal if there are inadequate infection control practices at home
- HCP management of control of infections is hampered by entry of people into hospitals and community who have been infected in the community
- There is little or no monitoring of HH practices in community
Breaking the Chain of Infection in the Home

Source of pathogen: people, pets (colonized or infected), contaminated food or water

Exit route; feces, vomit, wound exudates, skin scales juices from food

Recipient: all are at risk, but some are higher risk of infection

Portal of entry: mouth, nose, conjunctive
Damaged skin or mucous

Spread of pathogen: via hands, hand & food contact surfaces, cleaning clothes and other cleaning utensils, clothing and linens
Public Health Nursing HH Initiatives

- Presentations to pre-school and school aged children
  - Age specific teaching incorporating the following:
    - Glo Germ Kits
    - Videos
    - Demonstrations
    - Activities (i.e. coloring, word searches, etc.)
Public Health Nursing HH Initiatives

- PHNs also provide HH education during:
  - Pre-natal classes
  - Home visits for post natal checks
  - Clinic visits for newly diagnosed MRSA clients
  - Influenza season
  - International travel clinics
Hand Hygiene: Key to Success

- System change
- Safety Climate
- Improved Hand Hygiene
- Reminders
- Training & Education
- Audits & feedback
It’s in “your” hands