Canadian Committee on Antibiotic Resistance Comité canadien sur la résistance aux antibiotiques



Infection Prevention and Control Best Practices

for Long Term Care, Home and Community Care including Health Care Offices and Ambulatory Clinics *June, 2007*

Sponsored by

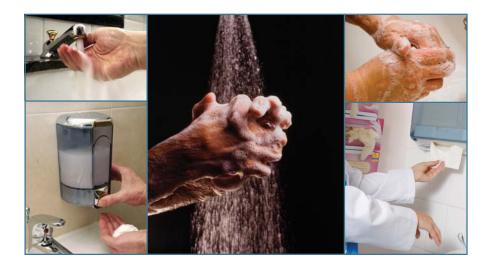
The Canadian Committee on Antibiotic Resistance











DISCLAIMER

This best practices document is intended to guide clinical practice only and provide decision-making on infection prevention and control issues. Its use should be flexible to accommodate family/client wishes and local circumstances while ensuring best practice in infection prevention and control. They neither constitute a liability nor discharge from liability. While every effort has been made to ensure accuracy of the contents at the time of publication, neither the authors nor CCAR give any guarantee as to the accuracy of information contained in them nor accept any liability, with respect to loss, damage, injury or expense arising from any such errors or omission in the contents of this work.

COPYRIGHT

This document is in the public domain and may be used and reprinted without special permission except for those copyrighted materials noted for which further reproduction is prohibited without specific permission of copyright holders.

CCAR would appreciate citation as to source. The suggested format is indicated below: Canadian Committee on Antibiotic Resistance (2007) *Infection Prevention and Control Best Practices for Long Term Care, Home and Community Care including Health Care Offices and Ambulatory Clinics*

First Printing, June, 2007. It is the intent of the authors to update this document every five years.

CANADIAN COMMITTEE ON ANTIBIOTIC RESISTANCE (CCAR)

The Canadian Committee on Antibiotic Resistance (CCAR) was formed in 1998 to co-ordinate Canadian efforts to control the development and spread of antimicrobial resistance. Working together on activities identified in the *National Action Plan to Address Antibiotic Resistance*, CCAR's main areas of interest are resistance surveillance, infection prevention and control, and optimal antibiotic use. We provide outreach to the health care and agricultural communities through a variety of activities, including professional seminars, a series of reports and informational documents for specific target audiences and managing one of the most comprehensive websites on resistance in Canada (<u>www.ccar-ccra.org</u>).

CCAR also works with various levels of government to develop policy and identify human and financial resources to address resistance. The Public Health Agency of Canada provides considerable financial support through a three-year contract for services which expires in March, 2008. Whenever possible, CCAR leverages these resources to undertake activities and specific projects with those partners dedicated to the same interest in reducing antimicrobial resistance.

PREPARED BY

Clare Barry, Ministry of Health and Long Term Care

Nora Boyd, Bluewater Health, Canadian Committee on Antibiotic Resistance

Nan Cleator, Victorian Order of Nurses, Canada

Brenda Dyck, Winnipeg Regional Health Authority

Agnes Morin Fecteau, Veterans Affairs Canada, Ste Anne's Hospital

Dr. Elizabeth Henderson, Calgary Regional Health Authority

Linda Kingsbury, Vancouver Costal Health

Marg McKenzie, Emergency Response, Edmonton Alberta

Judy Morrison, Public Health Agency of Canada

Patsy Rawding, Infection Control, Nova Scotia

Liz Van Horne, Ministry of Health and Long Term Care

Rick Wray, Hospital for Sick Children

ISBN # 978-0-9783500-0-0

'Clean Care is Safer Care' WHO

To fight the spread of health careassociated infections, the World Health Organization and its partners launched the Global Patient Safety Challenge with the theme "Clean Care is Safer Care" in October, 2005. As part of the launch, the WHO Guidelines on Hand Hygiene in Health Care were made available. For more information about these guidelines, please visit:

http://www.who.int/en/

Canadian Committee on Antibiotic Resistance Comité canadien sur la résistance aux antibiotiques



Infection Prevention and Control Best Practices

for Long Term Care, Home and Community Care including Health Care Offices and Ambulatory Clinics

Stakeholder Review List

CCAR would like to acknowledge and express appreciation for the following stakeholders whose input was considered in the final product.

Donna Baker RN Manager, Infection Prevention and Control SCO Health Service 43 Bruyere St. Ottawa. ON K1N 5C8

Risa Cashmore RN BScN CIC Public Health Nurse Peel Health Unit Mississauga Ontario

Terry Charlebois RN ICP/Nurse Manager/Staff Education Oakwood Terrace 10 Mount Hope Ave. Dartmouth NS B2Y 4K1

Dr. John Conly Professor of Medicine Microbiology Foothills Hospital 9th Floor North Tower 1403- 29th St NW Calgary AB T2N 2T9

Bruce Gamage RN BSN CIC Infection Control Consultant BC Centre for Disease Control 655 W. 12th Ave. Vancouver BC Denise Gravel RN MSc CIC Senior Epidemiologist Blood Safety and Health Care Acquired Infections Division Public Health Agency of Canada 2006 Rolling Brook Drive Ottawa, ON K1W 1C7

Heather Hague RN M.Ed CIC Manager, Infectious Diseases Program Niagara Region Public Health Department P.O.Box 1052 Thorold ON L2V 0A2

Gwen Hammonds RN Clinical Nurse Educator Care Partners St. Thomas, ON

Bernice Heinrichs MN CIC Project Manager Infection Prevention and Control Disease Control and Prevention Branch Public Health Division Alberta Health and Wellness 23rd Floor Telus Plaza N Tower 10025 Jasper Ave. NW Edmonton AB

Bonnie Henry MD Physician Epidemiologist BC Centre for Disease Control 655 West 12th Ave. Vancouver BC Charlene McMahon RN BScN DPHN Public Health Nurse CD Department Lambton Community Health Services Department 160 Exmouth St. Sarnia, ON N7T 7Z6

Sharon O'Grady RN CIC Infection Control Practitioner Riverside Long Term Care Centre Toronto ON

June Pollett RN MN Regional Manager of Infection Control Services Eastern Regional Health Authority 10 Escasoni Place St john's NL A1A 3R6

Dr. John Roman DDS Doctor of Dental Surgery J. Roman Health Services Ltd. 217 Wellington St. Sarnia ON N7T 1G9

Josie Ryan RN CIC Corporate Director Organizational Health Northwoodcare Incorporated 2615 Northwood Terrace Halifax, NS B3K 3S5

Marilyn Weinmaster RN BScN CIC Extended Care/Veterans Program Wascana Rehabilitation Centre 2-440 2180 23rd Ave. Regina, SK

Infection Prevention and Control Best Practices

for Long Term Care, Home and Community Care including Health Care Offices and Ambulatory Clinics

TABLE OF CONTENTS

Page	è
Introduction, Purpose and Scope of Document	7
Guiding Principles and Levels of Evidence 8	3
Infection Prevention and Control Best Practices	
Basic Infection Prevention Measures9)
Routine Practices 12	2
Summary of Best Practices23	3
Appendix I – Definitions 24	ļ
Appendix II – Fact Sheets	
A. Hand Hygiene 26	5
B. Routine Practices Poster 28	3
C. Sample Screening Poster 29	
D. Sample Screening Questionnaire	
E. Respiratory Etiquette Poster	l
F. Infection Control Criteria for Purchase of Personal Protective Equipment for Routine Practices	,
G. Laundry	
H. Personal Care Supplies	
I. Sterilization and Disinfection	
J. The Use of Gowns, Aprons and Lab Coats	7
K. Medication Safety Poster	3
Appendix III – Audit Tools	
A. Long Term Care)
B. Emergency Response Facilities (EMS)	3
C. Health Care Office 45	
D. Home Health Care	3
Appendix IV – Core Competencies for Health Care Providers	l
References	3

Infection Prevention and Control Best Practices

for Long Term Care, Home and Community Care including Health Care Offices and Ambulatory Clinics

INTRODUCTION

Health care associated infection impacts patient/resident/client outcomes across the continuum (Baker 2004). Impact includes both morbidity and decreased quality of life. Health care providers and clients/residents are exposed to infection through inadequate infection prevention and control practices. The World Health Organization (WHO) has launched its Global Safety Challenge promoting 'Clean Care is Safer Care', which identifies the dangers of health care associated infections. The WHO's 'Clean Care is Safer Care' focuses on clean hands, clean equipment, clean clinical procedures and clean environment. Additional information on WHO's document can be found at: http://www.who.int/en/.

The Canadian Committee on Antibiotic Resistance (CCAR) has sponsored the development of best practices for asepsis and hygiene for long term care (LTC) facilities and community health care settings. The trend toward shorter hospital stays has resulted in more complex care being provided outside the hospital in LTC facilities and in the community and home care. These clients often are sicker and more often have invasive devices, require invasive procedures which makes them more vulnerable to infections, which in turn can cause serious complications.

This document uses the Canadian Community and Hospital Infection Control Association's (CHICA-Canada) core competencies for health care providers as a framework to determine requirements for *Infection Prevention and Control in Long Term Care, Home and Community Care including Health Care Offices and Ambulatory Clinics* (Appendix IV). Reference: (Henderson et al, 2006).

This document will be reviewed and updated every two years and as new information is published.

PURPOSE

This document is to assist the health care provider by providing a succinct guide to clean care in the long term care setting, and home and community care settings. This document will focus on screening clients/residents, risk assessment, and risk reduction strategies including clean hands, clean equipment, clean environment and health care provider and client education.

SCOPE OF DOCUMENT

This document covers long term care facilities (such as nursing homes, homes for the aged, retirement homes, behavioural health facilities and group homes) and community settings (such as health care practitioner offices – doctors offices, rehabilitatin therapy clinics, laboratory and diagnostic clinics, dental clinics), community and home health care providers.

[7]

Health care providers are defined as: An individual who may have the potential to acquire or transmit an infectious agent during the course of his or her work in the health care workplace.



GUIDING PRINCIPLES

- 1. Infection prevention and control strategies are designed to protect clients, health care providers and the community.
- 2. Health care associated infections cause significant morbidity and mortality and at least 30% of health care associated infections can be prevented by following infection prevention and control strategies. Reference: (Haley et al, 1984).
- 3. A systematic approach to infection prevention and control requires each health care provider to play a vital role in protecting everyone who utilizes the health care system, in all of its many forms: pre-hospital settings, hospitals, clinics, offices, home care and community programs, etc.
- 4. Health care providers follow infection prevention and control practices at all times and use critical thinking and problem solving in managing clinical situations.

Reference: Ontario Ministry of Health and Long Term Care Infection Prevention and Control Core Competencies Program, 2005.



Canadian Committee on Antibiotic Resistance

BASIC INFECTION PREVENTION MEASURES

HIERARCHY OF INFECTION CONTROL MEASURES

(Adapted from BC Centre for Disease Control Document on Respiratory Outbreaks)

There are important concepts regarding infection prevention and control measures that have been clarified over the past decade. Working with occupational health and safety groups and building engineers has created a framework that includes three levels of control: engineering controls, administrative controls and personal protective measures.

- 1. Engineering controls are built into the design (private bathrooms, private rooms, HVAC systems) of a health care facility. Infection prevention and control professionals should be involved in the design and planning of new facilities. An Infection Control Risk assessment should be done to evaluate and mitigate potential risks for microorganism transmission by means of air, water and environmental sources.
- 2. Administrative controls include protocols for hand hygiene, immunization of residents and caregivers, protocols for managing caregivers and clients during an outbreak and protocols for caring for clients with communicable diseases.
- 3. Personal protective equipment is the least desirable way to control hazards as it does not eliminate them, it merely contains the hazard and is dependent on its appropriate use by educated, knowledgeable staff.

RATIONALE FOR ROUTINE PRACTICES THE CHAIN OF TRANSMISSION

(Source: Public Health Agency of Canada. <u>Routine Practices and Additional Precautions for Preventing</u> <u>the Transmission of Infection in Health Care</u>. 1999. http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/ 99vol25/25s4/index.html)

Transmission of infection during the provision of health care requires three elements: a source of infecting microorganisms, a susceptible host, and a means of transmission for the microorganism. In health care settings, because agent and host factors are more difficult to control, interruption of transfer of microorganisms is directed primarily at transmission.

SOURCE

Human sources of the infecting microorganisms in health care facilities may be clients, health care providers, visitors, care providers or family members and may include persons with acute disease, persons in the incubation period of a disease, persons who are colonized by an infectious agent but have no apparent disease, or persons who are chronic carriers of an infectious agent. Other sources of infecting microorganisms can be the client's own endogenous flora, which may be difficult to control, food, water and inanimate environmental objects that have become contaminated, including equipment and medications. The microorganisms include bacteria, viruses, fungi and parasites transmitted through these means and also via vectors such as lice, mosquitoes, flies and vermin.

HOST

Resistance among persons to pathogenic microorganisms varies greatly. Some persons may be immune to infection or may be able to resist colonization by an infectious agent. Other individuals exposed to the same agent may establish a comfortable or residential relationship with the infecting microorganism and become asymptomatic carriers. Others may develop clinical disease. Host factors such as: extremes of age; underlying diseases; certain treatments with antimicrobials, corticosteroids, or other immunosuppressive agents; irradiation; and breaks in the first line of defense mechanisms (e.g. those caused by such factors as surgical operations, anesthesia, invasive procedures and indwelling devices) may make clients more susceptible to infection. Client self-care practices can

FIGURE 1: HOW MICROORGANISMS ARE ACQUIRED





improve host susceptibility (e.g. good oral hygiene, proper hydration, nutrition, skin, hand hygiene, respiratory etiquette and environmental factors) and reduce risk of infection.

TRANSMISSION

Microorganisms are transmitted in health care settings by several routes, and the same microorganism may be transmitted by more than one route. There are five main routes of transmission: contact, droplet, airborne, common vehicle, and vectorborne. For the purpose of this manual, common vehicle and vectorborne will be discussed only briefly because neither play a significant role in typical health care associated infections.

(1) **Contact transmission**, the most important and frequent mode of transmission of health care associated infections (HAI), is divided into direct and indirect contact transmission.

• <u>direct contact transmission</u> involves a direct body surface-to-body surface contact and physical transfer of microorganisms between an infected or colonized person, such as occurs when a health care provider turns a client, gives a client a bath, or performs other client care activities that require direct personal contact. Direct contact transmission also can occur between two clients or a visitor, with one serving as the source of the infectious microorganisms and the other as a susceptible host. For example a visiting nurse must wash his or her hands at the beginning and end of their visit so they don't transfer organisms from one person to another.

• **indirect contact transmission** involves contact between a susceptible host and usually a contaminated inanimate object, such as equipment, instruments, and environmental surfaces. This is often the result of contaminated hands that are not washed which contaminate the object or environment. For example, activiation staff who use a ball to pass from resident to resident.

(2) Droplet transmission, theoretically, is a form of contact transmission. However, the mechanism of transfer of the pathogen to the host is quite distinct from either direct or indirect contact transmission. Droplets are generated from the source person primarily during coughing, sneezing, and talking, and during the performance of certain procedures such as suctioning and administering nebulized medications. Transmission occurs when droplets containing microorganisms generated from the infected person are propelled a short distance through the air (usually less than one metre) and deposited on the host's conjunctivae, nasal mucosa, or mouth. Because droplets do not remain suspended in the air, special air handling and ventilation are not required to prevent droplet transmission; that is, droplet transmission *must not* be confused with airborne transmission. Droplets can also contaminate the surrounding environment and lead to indirect contact transmission.

- (3) Airborne transmission occurs by dissemination of either airborne droplet nuclei (small particle residue [five mm or smaller in size] of evaporated droplets containing microorganisms or dust particles containing the infectious agent (e.g. dust created by rotary powered foot care tools). Microorganisms carried in this manner remain suspended in the air for long periods of time and can be dispersed widely by air currents. These may become inhaled by a susceptible host within the same room or over a longer distance from the source client, depending on environmental factors. Environmental controls are important special air handling and ventilation help reduce airborne transmission. Microorganisms transmitted by airborne transmission include *Mycobacterium tuberculosis*, *Rubeola (Measles), Varicella (Chickenpox), Diseminated Zoster (widespread shingles)* and *hantaviruses*. In settings where environmental controls are not available, use a hierarchy of control which means using personal protective equipment. Immune individuals do not require PPE (Varicella and Rubeola).
- (4) **Common vehicle transmission** applies to microorganisms transmitted by contaminated items such as food, water, medications, medical devices, and equipment.
- (5) Vectorborne transmission occurs when vectors such as mosquitoes, flies, rats, and other vermin transmit microorganisms; this route of transmission is of less significance in health care facilities in Canada than in other settings.



ROUTINE PRACTICES

Routine Practices are a way of thinking and acting that forms the foundation for limiting the transmission of microorganisms in all health care settings. It is the standard of care for all patients/clients/residents.

Reference: Rick Wray, Hospital for Sick Children

Routine Practices have been used by the Public Health Agency of Canada since 1999 for the process of risk assessment and risk reduction strategies. They are used with all clients/residents at all times and include education of health care providers, clients, families and visitors. Routine Practices supercede, and are more encompassing, than previous bloodborne pathogen precautions or Universal Precautions.

Based on the assumption that all blood and certain body fluids (urine, feces, wound drainage, sputum) contain infectious organisms (bacteria, virus or fungus), Routine Practices reduce exposure (both volume and frequency) of blood/body fluid to the health care provider. The key to implementing Routine Practices is to assess the risk of transmission of microorganisms before any interaction with patients/clients/residents. The consistent use of Routine Practices will assist in reducing exposure (both volume and frequency) of all blood/body fluid to the health care provider and transmission to others and the environment.

THE ELEMENTS OF ROUTINE PRACTICES ARE:

- Hand hygiene
- Risk assessment related to client symptoms, care and service delivery, including screening for infectious diseases, fever respiratory symptoms, rash, diarrhea, excretions and secretions
- Risk reduction strategies through use of personal protective equipment (PPE), cleaning of environment, laundry, disinfection and sterilization of equipment or single use equipment, waste management, safe sharps handling, client placement and healthy workplace practices
- Education of health care providers, clients and families/visitors

Routine Practices prevent transmission of microorganisms in most settings and include the following requirements (see PIDAC Routine Practices Poster- Appendix IIB):

- 1. Hand hygiene is the single most important thing to do to prevent transmission of infection. Although health care providers know the importance of hand hygiene, studies continue to show health care providers perform hand hygiene less than half the time they should. Hand hygiene should be performed:
 - Before providing care to the client
 - Between dirty and clean activities
 - When PPE is removed
 - When leaving the client
 - Use alcohol-based hand rub at 60-90% concentration ethyl or isopropyl or Hand washing with plain liquid soap and running water.
 - The use of alcohol-based hand rub is the prefered method of decontamination of hands that are not visibly soiled and should be available at the point of care.
 - Use hand hygiene after touching blood, body fluids, excretions and contaminated items in the client/ resident's environment.
 - Wash hands:
 - after removing gloves
 - between clients/residents
 - before contact with clean items
 - before aseptic practices on a patient

Hand hygiene also includes caring for hands to maintain intact skin. Regular use of hand lotion is recommended.

See attached Hand Hygiene Fact Sheet (Appendix IIA).

- **2a. Screening for communicable diseases** (coughs, colds and diarrhea). In the clinic setting, ask simple questions.
 - Do you have a new cough or shortness of breath?
 - If no no further questions.
 - If yes Do you have a new fever or chills in the last 24 hours?
 - Do you have new onset diarhea?
 - Do you have a new undiagnosed rash?

See attached Sample Screening Poster and Example Screening Questionnaire (Appendix IIC&D).

- **2b. Risk Assessment:** there are two levels of assessment required.
 - i. Point of entry or while booking appointments over the phone, a screening for fever, cough or respiratory symptoms, rash or diarrhea is done.

Script for appointment booking:

If you have symptoms of fever and cough, diarrhea or rash within 24 hours of your next appointment or visit, then let this office (or health care provider) know before the scheduled appointment (or visit).

- ii. Assessment should be standardized during the admission process to include the screening questions plus asking about recent exposures to infectious disease such as *Chickenpox, Measles* or *Tuberculosis* and recent travel depending on what is prevalent in your community. Other questions would include:
 - Do they have a cough and are not able to follow respiratory etiquette?

Respiratory etiquette includes covering a cough or sneeze and disposing of tissues in a waste receptacle (see attached Respiratory Etiquette poster in Appendix IIE).

- Do they have a fever?
- Do they have drainage or leakage? Is it contained?
- Are they incontinent?
- How susceptible is the client to infection? Is their immune system intact (not the very young or very old)? Do they have invasive devices, open areas or auto-immune diseases?)
- What is the risk of exposure to blood, body fluids, mucous membranes, non-intact skin in the tasks about to be performed?
- How competent is the health care provider in performing this task?
- How cooperative will the client/resident be while the task is performed?
- **3. Risk Reduction Strategies** will assist the health care provider in minimizing his or her exposure to body fluids and mucous membranes. Once the risk assessment has been completed, strategies, including hand hygiene, use of personal protective equipment (PPE), client placement and cleaning and disinfection of equipment, should be used to reduce risk of transmission of microorganisms within the health care setting. Whenever you might come in contact with non intact skin, mucous membranes or body fluids, you need to put on a barrier or personal protective equipment (PPE).

a. Client Placement:

- i. Clinic Setting maintain a three to five foot distance until initial triage is completed. Sit beside the client (as opposed to across from). Segregate if possible in waiting rooms.
- ii. Planning Visit visit client with uncontained draining wound at the end of the day.
- iii. Long Term Care place susceptible clients (with open areas or indwelling tubes) with low risk clients (continence, follows directions, maintain hygiene).

In long term care facilities (LTCF) it is important to assess and integrate clients into activities safely. The admission assessment will assist to identify which clients can participate in levels of interaction with other clients, for example participating in a sing-song is acceptable for a client with a covered, contained wound.

b. Personal Protective Equipment (PPE)

Protect yourself and others from body substances and mucous membranes. You will need to put on a barrier or personal protective equipment (PPE) whenever there is a risk of coming in contact with non-intact skin, mucous membranes or body fluids.

Gloves: The most commonly worn personal protective equipment is quality vinyl gloves. Choose glove material based on the risks for which you are wearing them (e.g. vinyl for personal care and wound care, latex for sterile invasive procedures, nitrile for exposure to chemicals). Wear them for likely hand exposure to blood and body fluids.

Put on clean gloves just before touching mucous membranes and non-intact skin.

Change gloves and perform hand hygiene when:

- Moving from dirty areas to clean areas on the same client
- Moving from dirty to clean procedures on the same client
- After contact with large amounts of blood and body fluids
- When in contact with blood and body fluids containing high concentrations of microorganisms



Remove gloves promptly after use and perform hand hygiene before touching clean items and environmental surfaces; before touching your eyes, nose and mouth; and before going on to another client. Remove gloves as the first step in the removal of PPE.

WHEN TO WEAR GLOVES	WHEN NOT TO USE GLOVES
 When there is a risk of exposure/splash/ contact with blood, body fluids and non- intact skin. Examples: Changing a dressing Changing diapers Ceaning up an incontinent resident/client Performing mouth care 	 Examples: Feeding a resident/client Social touch Pushing a wheelchair Delivering meals, mail, laundry Providing care to residents with intact skin such as taking temperature

Masks (Surgical) Face Protection/Face Shields: Wear masks to provide protection of the health care provider's nose and mouth from likely splashes and sprays of blood or body fluids. Face shields and eye protection guard the eyes of health care providers against likely splashes and sprays of blood or body fluids. Choose eye gear that protects the eye from all directions. Splashes and sprays can be generated from a client's behaviour (e.g. coughing or sneezing) or during procedures (e.g. suctioning, wound irrigation, cleaning soiled equipment, using a spray hose). Surgical masks with ear loops are the easiest to put on and remove. Apply masks after donning the gown and eye protection next. Apply before performing a procedure and wear within three to five feet of the coughing, sneezing client. This prevents the transmission of microorganisms to the health care provider's mucous membranes in their eyes, nose and mouth to reduce infection.

N95 Respirators: For additional information, please visit: <u>http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/</u> <u>99vol25/25s4/index.html.</u>

A fit tested N95 respirator is required to protect the airways of the health care provider. It is intended to seal tightly to the face and filters airborne organisms. Wear a fit tested N95 respirator if:

- The client has a known or suspected airborne infection (e.g. Tuberculosis, Chickenpox, Measles, Disseminated Zoster or hantavirus)
- Performing aerosolizing procedures with a client with droplet infection (e.g. open suctioning, nebulized medications, BIPAP)
- Directed by public health officials with a new or emerging disease where the route of spread is not known

[15]

<u>Gowns:</u> Put on the gown as the first procedure when donning PPE; mask and eye protection is the second procedure. Wear long sleeved gowns to protect uncovered skin and clothing from likely splashes, sprays or soiling during procedures and client care activities. Remove the soiled gown promptly after use and perform hand hygiene to avoid transfer of organisms to clients and the environment. Remove gown after glove removal in the PPE removal sequence. See attached Fact Sheet on Gowns, Aprons and Lab Coats (Appendix IIJ)

Canadian Committee on Antibiotic Resistance

c. Safe handling of sharps

Safe handling of sharps reduces exposure to bloodborne pathogens. Use appropriate barriers and safe work practices when using sharp instruments and devices (e.g. needles, scalpels, etc.), after procedures and when cleaning used instruments. Use point of use disposal receptacles for sharps and use puncture resistant containers with clear labels, a handle and tight fitting lid to reduce risk in the work area.

Dispose of sharps immediately in a clearly labelled, puncture resistant container. Do not recap, bend or manipulate needles in any way for disposal. The container should have a tightly fitting lid that seals and prevents leakage. This reduces risk to you, other health care providers, clients and others in the environment (e.g. waste disposal handlers). Fill containers only to $\frac{3}{4}$ full, close the lid securely and tape closed.



Replace the used container. Safety of placement of the sharps container in the client's home/mobile clinics should be a top priority in consideration of children, confused adults, drug abusers, etc.

Used sharps are considered **biomedical waste** in health care offices, labs and long term care facilities. Dispose of used sharps containers in accordance with regulations from municipal, provincial/territorial authorities. For home care, follow municipal regulations for disposal as some municipalities allow used needles from domestic waste to be disposed of as general waste.

- Never uncap a needle or sharp unless you know where you will dispose immediately after use
- Always carry a small sharps container in your car
- Local pharmacies often have an exchange program for sharps containers
- Check the Canadian Diabetes Website for recommendations (http://www.diabetes.ca/)
- Ensure the safety of waste handlers by disposing of sharps in sealed puncture resistant containers

(For more information on sharps safety, please visit the Ontario Safety Association for Community and Health Care website: http://www.osach.ca/new/SaftInfo/SEMS.html.)

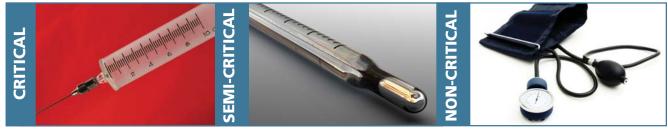
d. Clean Client Care Equipment

Ensure multi-use equipment is not used in the care of another client until it has been properly cleaned and re-processed. Do not re-use single use items. Use clean hands to handle clean equipment. Any equipment or device that comes in contact with mucous membranes, open areas or beneath the skin in sterile sites must be re-processed correctly. Single use items, such as a tourniquet or needle, are one-client use only and are disposed of properly.

There are three categories of client equipment (each category defines how it must be cleaned to prevent infection transmission).

- <u>Critical</u> comes into contact with sterile sites (e.g. needles)
- Semi Critical comes into contact with mucous membranes or non-intact skin (e.g. scopes, thermometers)
- Non Critical comes into contact with intact skin (e.g. Blood pressure cuff)

Spaulding classification



When does re-useable medical equipment require cleaning?

- For maintenance requirements (everyday accumulation of dust and dirt) the pieces of equipment in this category include blood pressure cuffs, scissors, stethoscopes, digital cameras, ultrasound machines and electronic equipment
- To remove blood and body fluids (before disinfecting and sterilizing)
- When equipment has been exposed to an infectious organism (before disinfecting or sterilizing)

If re-useable medical equipment doesn't touch the client's skin, does it require cleaning, disinfection or sterilization?

There is no requirement for routine disinfection or sterilization as those pieces of equipment carry little risk of spreading infection. However, there is a requirement to disinfect or sterilize those pieces of equipment if they become contaminated with blood or body fluids or if they have been exposed to a client with an infectious organism.

What other strategies should be used to reduce risk when using medical equipment with a client who has an infectious organism?

Single use items (e.g. tourniquet) are used for one client only and are properly discarded after use. Reuseable medical equipment used to assess clients and provide care must be appropriately cleaned, disinfected or sterilized based on how it is used and whether it has come into contact with known or suspected infectious organisms. Re-useable medical equipment is not used in the care of another client until it has been properly cleaned. **Use clean hands or clean gloves to handle clean equipment.**

In a health care office or long term care facility, most critical items will be disposable, one time use. **See** attached sheet on Sterilization and Disinfection (Appendix III).

Sterile medicines

Multidose vials must be labelled with the date, time and initials of when the vial was opened to ensure potency. Use sterile needles and clean the stopper when withdrawing medications to ensure the vial maintains sterility. There have been cases of contamination of multidose vials if syringes or needles are re-used. Avoid multidose vials if possible due to the risk of contamination.

Medications, including vaccines that require refrigeration, must be stored in a manner that ensures they remain safe (e.g. cold chain for vaccines). This requires daily monitoring and documenting of fridge storage temperature. Separate fridge storage just for medications is required.

e. Clean Environment (Housekeeping Routines):

In long term care facilities, community agencies and health care offices, horizontal/high touch surfaces need to be cleaned daily and when visibly soiled. Housekeeping Routines should involve cleaning and disinfecting surfaces, toys and objects with a low level disinfectant (See Table 1 for types of disinfectants). Encourage clients and their caregivers to perform regular cleaning of frequently touched surfaces (e.g. taps, sinks, toilets, bedside tables) as one way to prevent the spread of infection to others in the home.



Chemical	Action	Application	Exposure Time	Comments
Quaternary ammonium compounds	LLD	Daily cleaning and sanitizing of surfaces and equipment	Use as directed on the label	Fairly inexpensive, releases volatile organic compounds
Accelerated hydrogen peroxide products	LLD	Daily cleaning and sanitizing of surfaces and equipment	As directed on the label	Safe and effective
Sodium hypochlorite (1:100 dilution of household bleach)	LLD	Daily cleaning and sanitizing of surfaces and equipment	Until dry	Disinfectant but no cleaning properties

TABLE 1: LOW LEVEL DISINFECTANTS (LLD)

TABLE 2: CLEANING PROCEDURES FOR COMMON ITEMS

SURFACE / OBJECT	PROCEDURE	SPECIAL CONSIDERATIONS
Horizontal surfaces such as overbed tables, work counters, baby weigh scales, beds, cribs, mattresses, bedrails, call bells	 regular cleaning with detergent cleaning when soiled cleaning between clients and after discharge 	Special procedures called carbolizing are not necessary. Some environmental surfaces may require low level disinfection depending on the type of invasive procedure being done (nurseries, pediatric offices, procedure rooms)
Walls, blinds, curtains	Should be cleaned regularly with a detergent and as splashes/visible soil occur	
Floors	1. regular cleaning 2. cleaning when soiled 3. cleaning between patients 4. damp mopping preferred	Detergent is adequate in most settings Blood/body spill should be cleaned with disposable cloths followed by disinfection with low level disinfectant
Carpets/ upholstery	Should be vacuumed regularly and shampooed as necessary	
Toys	Should be regularly cleaned, disinfected with a low level disinfectant, thoroughly rinsed and dried	For pediatric settings, toys should be constructed of smooth non- porous materials to facilitate cleaning. Do not use phenolics.
Toilets and commodes	 regular cleaning cleaning when soiled clean between clients/after discharge use a low level disinfectant 	Dedicated equipment is best

Source: PHAC Handwashing, Cleaning Disinfection and Sterilization Guideline – 1998, Page 30.

Cleaning of surfaces requires the removal of body substances by staff wearing the appropriate PPE and then disinfecting the area. Appropriate routine cleaning and removal of soil are essential. Body fluid spills or equipment used by a client requires use of PPE (usually gloves when cleaning, removing the soil) and then disinfecting the area or equipment. WHMIS sheets (MSDS) must be available for the disinfectant being used. Commercial spill kits are useful for clinics and offices.

Cleaning is accomplished with water, detergents and mechanical action. Skin antiseptics should not be used for disenfecting inanimate objects. Detergents are adequate for most surface cleaning.

- 1. Using friction, clean equipment with soap and water to remove any soil, dust, blood or body fluids from the surface of the equipment. A brush may be necessary.
- 2. Dismantle equipment to clean in crevices when possible
- 3. Rinse and dry

Regular schedules for daily cleaning are required. Client contact areas must be cleaned between each client. Responsibility for cleaning must be clearly assigned.

How to clean up (and disinfect) after a blood or body fluid spill:

- 1. Put on a pair of disposable gloves
- 2. Clean up the spill using paper towels, then wash the area with detergent and water
- 3. Wipe the surface with a fresh solution of 1:10 bleach (50ml of bleach to 450 ml of water)
- 4. Leave the solution in contact with the surface until dry
- 5. Dispose of used paper towel in garbage, remove gloves, wash hands

f. Laundry

Microbial counts on soiled linens are significantly reduced during mechanical action and dilution of washing and rinsing. With the high cost of energy and use of cold water detergents (which do not require heat to be effective), hot water washes (>71 degrees C for 25 minutes) may not be necessary. Several studies show low temperature laundering will effectively eliminate residual bacteria to a level comparable to high temperature laundering. (Reference: *PHAC Handwashing, Cleaning, Sterilization and Disinfection in Health Care*, 1998, page 34.)

Linens used in the health care setting can be laundered together using detergent and dried in a hot air dryer to ensure killing of microorganisms. Linens with organic material left on them will require pre-treating to remove the material. It is impossible to clean laundry when organic material is present.

In health care settings, linen may be cleaned within the setting or sent to a commercial laundry facility. **See the attached Laundry Fact Sheet in Appendix IIG for details on proper handling of laundry.**

Although soiled linen has been identified as a source of microorganisms, the risk of actual disease transmission appears negligible providing hygienic handling, storage and processing of clean and soiled linen are carried out. Clean laundry must be stored apart from soiled linens.

In homes, health care providers should handle any laundry soiled with blood or body fluids

with gloves and avoid touching it to their clothes or skin; position the laundry basket nearby to reduce handling (keep off the floor and upholstered furniture); handle with minimal agitation and do not shake; remove fecal material into the toilet. Teach family or caregivers how to handle contaminated laundry safely. Wash heavily soiled laundry

separately and add bleach to wash water according to manufacturers' instructions if material is bleach tolerant.



g. Waste is divided into three categories; **general**, **biomedical** and **pathological**. Legislation requires that biomedical waste be handled and disposed of in such a way as to avoid transmission of potential infections.

The most obvious **biomedical waste** generated in a long term care facility, health office or community health agency are sharps. Use puncture resistant sharps containers to remove, store and dispose of used sharps such as needles, blades, razors and other items capable of causing punctures.

Some municipalities may allow needles used in the home to be disposed of as **general waste**. Sometimes they may require decontamination by adding bleach first and then sealing the lid. Check with local authorities for the appropriate disposal method. Teach clients and their caregiviers in homes how to handle and dispose of sharps and sharps containers safely. If legally discarding a sealed container of sharps in the garbage, place it in the middle of the garbage bag to reduce risk of injury to the waste handlers.

Non-anatomical waste, such as liquid blood or body fluid drainage (e.g. chest tube drainage containers, IV blood filled tubing), must also be packaged as **biomedical waste**.

See Local, Regional, Provincial and Federal regulations on waste. Licensed medical waste handlers must be used to remove biomedical and pathological waste.

Anatomical waste such as body parts is classified as **pathological waste** and must be disposed of according to the regulations for handling pathological waste.

All other waste, such as general office waste, used gloves or non-sharp medical equipment, may be disposed of in regular waste and requires no special handling other than containment during disposal and removal.

This does not include waste that is "domestic waste". The Canadian definition of biomedical waste does not include domestic waste. For more information, please visit: <u>http://www.ene.gov.on.ca/envision/</u><u>env_reg/er/documents/2001/RAOIE0023_g2.pdf</u>.

Recommendations for waste handling:

- 1. Local municipal regulations on waste segregation must be followed
- 2. Waste generated in health care settings is no more hazardous than household waste
- 3. Segregating sharps waste and packaging it in a puncture resistant container according to municipal regulations is required so it does not result in injuries by waste industry workers or community members
- 4. Package waste to contain it in a leak-proof container that can be disposed of or cleaned after emptying
- 5. Empty waste frequently and store in a manner that protects it prior to pick up/disposal
- 6. Waste handlers should wear protective apparel and be offered Hepatitis B vaccination

Source: PHAC: Handwashing, Cleaning, Disinfection and Sterilization Guideline. 1998.

Liquid waste such as urine, feces, provodine iodine, irrigating solutions, suctioned fluids, excretions and secretions may be poured carefully down the client's toilet, which is connected to a sanitary sewer or septic tank. Body fluids in small amounts such as blood in a syringe withdrawn from a CVAD before a blood sample is obtained may be discarded in a puncture proof sharps container. Provincial and territorial regulations may dictate the maximum volume of blood or body fluids that is permitted to be poured in the sanitary sewer (e.g. 300mls). If there is likely to be splashes or sprays from disposing of blood or body fluids, apply PPE.

h. Healthy Workplace - Keeping your staff and clients safe

All staff working in health care should have a two-step tubercline skin test at the beginning of employment unless they have documentation of a negative skin test in the past 12 months. The local Medical Officer of Health can advise on the need for routine testing depending on the prevalence of Tuberculosis in your community. Health care providers need to know their history of childhood communicable diseases.

Organizations should commit to promoting vaccine preventable diseases. Documentation of immune status will be considered when assigning a health care provider to a particular case.

For additional information, please review Health Canada's Canadian Immunization Guideline at: <u>http://www.phac-aspc.gc.ca/publicat/cig-gci/pdf/cdn_immuniz_guide-2002-6.pdf.</u>

Recommended immunization of staff includes:

- Annual influenza immunization
- Measles, Mumps and Rubella (MMR) two doses
- Tetanus Diphtheria and Polio (TDP)
- Hepatitis B (full series with follow up blood work to determine conversion)
- For susceptible health care providers, varicella vaccine is recommended (history negative, IgG negative)

Staff should receive education on when to stay home from work in a health care setting. This includes:

- Febrile respiratory illness
- Dermatitis on their hands (consult your physician about your risk)
- Cold sores or shingles that can't be covered
- The initial days of a respiratory illness
- Diarrhea
- Eye infections until treated

Most employers of health care providers will have policies in this regard.

If sharps are used in the practice setting, you will need to know where, when and how to obtain follow up after a potential bloodborne pathogen exposure.

Health care providers and volunteers practice healthy behaviours by self screening for fever, new cough, diarrhea and new rashes, and staying home when sick.

Follow-up for punctures or mucous membrane exposures to bloodborne pathogens

- Ensure you know the procedure at your facility
- First Aid: Rinse, wash and clean involved area after exposure
- Recognize importance of medical follow-up (use of Post-Exposure Prophylaxis [PEP] within one to two hours can reduce HIV transmission by 90%)
- Medical follow-up at appropriate agency to be assessed for bloodborne pathogens: Hepatitis B, Hepatitis C and HIV
- Proper follow-up includes;
 - Significance of exposure
 - Risk factors
 - Prophylactic medication if indicated
 - Education and counselling for informed consent and testing if required
 - Precautions necessary

If testing is required – serial testing should be conducted at time of exposure, then at three and six months.

i. Education

Educate health care providers regarding infection prevention and control strategies.

- Who provides infection prevention and control expertise to your setting? Who would you call for help?
- In most long term care facilities, there is a pre-existing relationship with the local health unit. For community agencies and health care offices, regional infection control networks and local health units have the expertise to answer infection prevention and control questions. The Public Health Agency of Canada (PHAC) Infection Control Guidelines, Centres for Disease Control and provincial guidelines provide written support.
- Provide leadership and act as a role model to other health care providers, clients/residents and families/ visitors with regard to infection prevention and control strategies
- Demonstrate work practices that reduce the risk of infection e.g. use hand hygiene, use proper PPE, be immunized, do not come to work with a communicable disease

Educate clients/residents/families about hygiene and infection prevention strategies such as hand hygiene.

- Health care providers should have access to standardized client education materials on infection reduction strategies such as: hand hygiene, respiratory etiquette, flu vaccination, 'what to do when you're sick' material appropriate to their client population
- Be able to identify unusual clusters or illnesses (e.g. respiratory, gastrointestinal, skin); and be aware of person, time, place tracking; and report to the appropriate person

Infection prevention and control health promotion

- Communicate between all sectors of health care to ensure that new/current material is available
- Provide leadership and act as a role model to other health care providers, patients/residents/clients and visitors with regard to infection prevention and control principles
- Demonstrate work practices that reduce the risk of infection (e.g. use hand hygiene, use proper protective equipment, be immunized, do not come to work with a communicable disease)

SUMMARY OF INFECTION PREVENTION AND CONTROL BEST PRACTICES

FOR LONG TERM CARE, HOME AND COMMUNITY CARE INCLUDING HEALTH CARE OFFICES AND AMBULATORY CLINICS

(See complete text for rationale)

- 1. Basic infection prevention measures are based on a knowledge of the chain of transmission and the application of Routine Practices in all settings at all times
- 2. The elements of Routine Practices include:
 - Hand Hygiene
 - Risk Assessment of clients
 - Risk Reduction Strategies through use of personal protective equipment, cleaning the environment and equipment, laundry, disinfection and sterilization of equipment or use of single use equipment, waste management, sharps handling, client placement and healthy workplace initiatives
 - Education of health care providers, clients and families/visitors/caregivers
- 2.1 Hand Hygiene includes handwashing and use of alcohol-based hand rub (greater than 60% alcohol) before client care, between dirty and clean and when leaving the client
- 2.2 Screening and assessing clients must be done to identify any communicable disease risks with the client contact
 - Clients are prompted to self assess when booking appointments
 - Clients are educated about respiratory etiquette
- 2.3 Risk Reduction Strategies that provide reduced exposure in the presence of communicable diseases must be used. Those strategies include the following:
 - client placement (segregation)
 - personal protective equipment proper use and removal
 - safe handling of sharps
 - clean client equipment including sterile medications
 - clean environment
 - clean laundry
 - proper handling of waste
 - healthy workplace practices that keep staff and clients safe including the need for immunization and education on when to stay home from work in a health care setting plus clear follow up protocol for exposure to blood and body fluids
- 2.4 Providing health care provider and client education on infection prevention and control strategies is required

APPENDIX I DEFINITIONS

ARO – ANTIBIOTIC RESISTANT ORGANISMS

An individual form of life (i.e. bacteria) that can withstand the effects of an antibiotic.

BACTERIA

Any of the unicellular, prokaryotic microorganisms of the class Schizomycetes, which vary in terms of morphology, oxygen and nutritional requirements, and motility, and may be free-living, saprophytic, or pathogenic, the latter causing disease in plants or animals.

COLONIZED

When a person has bacteria living on their skin or in their throat but is not ill because of it.

COMPETENCY

The individual should demonstrate proficient application of the skills and knowledge required to function capably, effectively and safely.

Having the capacity to behave or work in a way that promotes a safe environment under usual circumstances by demonstrating knowledge and skills related to hygiene and asepsis.***

***This process must be auditted on a routine basis to verify standards have been met.

FUNGUS

Any of numerous eukaryotic organisms that reproduce by spores. The spores of most fungi grow a network of slender tubes called hyphae that spread into and feed off of dead organic matter or living organisms. The hyphae often produce specialized reproductive bodies, such as mushrooms.

HEALTH CARE WORKER

Individual providing or supporting health care services that will bring them into contact with patients/clients/ residents.

This includes, but is not limited to:

• Emergency service workers, physicians, dentists, chiropractors, nurses, podiatrists, respiratory therapists and other allied health professionals, students, support services (e.g. housekeeping, dietary, maintenance, hairdressers), and volunteers

HIERARCHY OF CONTROL MEASURES

(Adapted from BC Centre for Disease Control Document on Respiratory Outbreaks)

There are important concepts regarding infection prevention and control measures that have been clarified over the past decade. Working with occupational health and safety groups and building engineers has created a framework that includes three levels of control: engineering controls, administrative controls and personal protective measures.

- Engineering controls are built into the design (private bathrooms, private rooms, HVAC systems) of a health care facility. Infection prevention and control professionals should be involved in the design and planning of new facilities. An Infection Control Risk assessment should be done to evaluate and mitigate potential risks for microorganism transmission by means of air, water and environmental sources.
- 2. Administrative controls include protocols for hand hygiene, immunization of residents and caregivers, protocols for managing caregivers and clients during an outbreak and protocols for caring for clients with communicable diseases.
- 3. Personal protective equipment is the least desirable way to control hazards as it does not eliminate them, it merely contains the hazard and is dependent on its appropriate use by educated, knowledgeable staff.

IMMUNE

Of, relating to, or having immunity to infection by a specific pathogen.

INFECTED

Entry of a pathogenic organism resulting in clinical signs and symptoms of infection such as redness, swelling, heat.

INFECTIVITY

The ability of a pathogen to establish an infection.

NORMAL FLORA

The human body contains a large number of bacteria, most of them performing tasks that are useful or even essential to human survival. Those that are expected to be present, and that under normal circumstances do not cause disease, are termed "normal flora".

PARASITE

An organism that grows, feeds, and is sheltered on or in a different organism while contributing nothing to the survival of its host.

PATHOGENIC

Having the capability to cause disease; producing disease.

ROUTINE PRACTICES

Routine Practices is the term used by Health Canada/Public Health Agency of Canada to describe the system of infection prevention and control practices recommended in Canada to prevent and control transmission of microorganisms in health care settings. **Consistent use of Routine Practices with all clients/residents/ patients is critical to preventing transmission of microorganisms from client to client and client to staff.**

The full description of Routine Practices to prevent and control transmission of health care acquired infections can be found on the Public Health Agency of Canada website: <u>http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/</u><u>99vol25/25s4/index.html</u>. **See attached Routine Practices Poster (Appendix IIB).**

RESPIRATORY ETIQUETTE (CDC DEFINITION)

Measures to contain respiratory secretions for all individuals with signs and symptoms of a respiratory infection and include:

- Cover nose/mouth when coughing or sneezing cough into elbow or sleeve
- Use tissues to contain respiratory secretions and dispose of them in nearest waste receptacle after use
- Perform hand hygiene (e.g. hand washing or use alcohol-based hand rub) after having contact with respiratory secretions and contaminated objects.

SUSCEPTIBILITY

Likelihood to be affected with a disease, infection, or condition.

VIRUS

Any of a large group of submicroscopic agents that act as parasites and consist of a segment of DNA or RNA surrounded by a coat of protein. Because viruses are unable to replicate without a host cell, they are not considered living organisms in conventional taxonomic systems. Nonetheless, they are described as "live" when they are capable of replicating and causing disease.

APPENDIX II – FACT SHEET (A) HAND HYGIENE FOR HEALTH CARE SETTINGS

Source: PIDAC Provincial Infectious Diseases Advisory Committee

In health care settings, hand hygiene is the single most important way to prevent infections.

Hand hygiene is the responsibility of all individuals involved in health care. Hand hygiene refers to removing or killing microorganisms on the hands as well as maintaining good skin integrity. There are two methods of removing/killing microorganisms on hands: washing with soap and running water or using an alcoholbased hand rub. Generally, the focus is on microorganisms that have been picked up by contact with clients/ health care providers, contaminated equipment, or the environment (transient or contaminating bacteria).

Effective hand hygiene kills or removes microorganisms on the skin and maintains hand health.

ALCOHOL-BASED HAND RUB

<u>Alcohol-based hand rub is the preferred method</u> for decontaminating hands. Using alcohol-based hand rub is better than washing hands (even with an antibacterial soap) when hands are not visibly soiled.

However, hand washing with soap and running water must be performed when hands are visibly soiled. If running water is not available, use moistened towelettes to remove the visible soil, followed by alcohol-based hand rub.

HAND WASHING

Most transient bacteria present on the hands are removed during the mechanical action of washing, rinsing and drying hands. Hand washing with soap and running water must be performed when hands are visibly soiled.

WHEN SHOULD HAND HYGIENE BE PERFORMED?

Hand hygiene must be performed:

- Before and after contact with a client
- Before performing invasive procedures
- Before preparing, handling, serving or eating food
- After care involving the body fluids of a client (e.g. assisting client to blow nose, toileting the client or doing wound care) and before moving to another activity
- Before putting on and after taking off gloves
- After personal body functions, such as using the toilet or blowing one's nose
- Whenever a health care provider is in doubt about the necessity for doing so
- When hands accidentally come into contact with secretions, excretions, blood and body fluids (hands must be washed with soap and running water)
- After contact with items in the client's environment

FACTORS THAT INFLUENCE HAND HYGIENE

The following factors influence the effectiveness of hand hygiene:

- Condition of the skin intact skin vs. presence of dermatitis, cracks, cuts or abrasions
- Nails: natural nails more than 3-4 mm (1/4-inch) long are difficult to clean, can pierce gloves and harbour more microorganisms than short nails
- Only nail polish in good condition is acceptable
- Artificial nails or nail enhancements are not to be worn by those giving patient care as they have been implicated in the transfer of microorganisms
- Jewellery rings and bracelets hinder hand hygiene, and should not be worn for patient contact; rings increase the number of microorganisms present on hands and increase the risk of tears in gloves

APPENDIX II – FACT SHEET (A) HAND HYGIENE FOR HEALTH CARE SETTINGS (CONTINUED)

HAND HYGIENE AGENTS

Alcohol-based hand rubs:

- are recommended to routinely decontaminate hands in clinical situations when hands are not visibly soiled
- provide for a rapid kill of most transient microorganisms
- contain a variety of alcohols in concentrations from 60 90%
- are not used with water
- contain emollients to reduce skin irritation
- are less time consuming than washing with soap and water

Liquid or Foam Soap:

- Soap must be dispensed in a disposable pump dispenser
- Soap containers are not to be topped up, as there is a risk of contamination
- Bar soaps are not acceptable in health care settings except for individual client/patient/resident personal use
- Antibacterial soaps may be used in critical care areas such as ICU, or in other areas where invasive procedures are
 performed

TECHNIQUES

Alcohol-based hand rub:

- Remove hand and arm jewellery. Jewellery is very hard to clean, and hides bacteria and viruses from the antiseptic action of the alcohol.
- Ensure hands are visibly clean (if soiled, follow hand washing steps).
- Apply between 1 to 2 full pumps of product, or squirt a loonie-sized amount, onto one palm.
- Spread product over all surfaces of hands, concentrating on finger tips, between fingers, back of hands, and base of thumbs. These are the most commonly missed areas.
- Rub hands until product is <u>dry</u>*. This will take a minimum of 15 to 20 seconds if sufficient product is used.

Hand Washing:

- Remove hand and arm jewellery. Jewellery is very hard to clean, and hides bacteria and viruses from the mechanical action of the washing.
- Wet hands with warm (not hot) water. Hot water is hard on the skin, and will lead to dryness.
- Apply liquid or foam soap. Do not use bar soap in health care settings as it may harbour bacteria that can then be spread to other users.
- Vigorously lather all surfaces of hands for a minimum of 15 seconds. Removal of transient or acquired bacteria requires a minimum of 15 seconds mechanical action. Pay particular attention to finger tips, between fingers, backs of hands and base of the thumbs. These are the most commonly missed areas.
- Using a rubbing motion, thoroughly rinse soap from hands. Residual soap can lead to dryness and cracking of skin.
- Dry hands thoroughly by blotting hands gently with a paper towel. Rubbing vigorously with paper towels can damage the skin.
- Turn off taps with paper towel to avoid recontamination of your hands (NOTE: If hand air dryers are used, handsfree taps are necessary).

Other Issues

- Intact skin is the first line of defence, therefore careful attention to skin care is an essential part of the hand hygiene program.
 - o A hand hygiene skin care program should be in place. Choice of products should also be "user-friendly."
 - o If integrity of skin is an issue, the individual should be referred to Occupational Health for assessment.
- Use a skin lotion that does not interfere with glove integrity.
- Note: It is reassuring to the client to see that the health care provider performs hand hygiene, as clients have an increased awareness of the importance of hand hygiene.

* Hands must be fully dry before touching the client or client's environment/equipment for the hand rub to be effective and to eliminate the extremely rare risk of flammability in the presence of an oxygen-enriched environment.

APPENDIX II – FACT SHEET (B) ROUTINE PRACTICES POSTER

Source: PIDAC Provincial Infectious Diseases Advisory Committee

ROUTINE PRACTICES to be used with ALL CLIENTS

Hand Hygiene

Hand hygiene is performed using alcohol-based hand rub or soap and water:

- Before and after each client/patient/resident contact
- Before performing invasive procedures
- Before preparing, handling, serving or eating food
- After care involving body fluids and before moving to another activity
- Before putting on and after taking off gloves and PPE •
- After personal body functions (e.g. blowing one's nose)
- Whenever hands come into contact with secretions, excretions, blood and body fluids
- After contact with items in the client/patient/resident's environment

Mask & Eye Protection or Face Shield

- Protect eyes, nose and mouth during procedures and care activities likely to generate splashes or sprays of blood, body fluids, secretions or excretions
- Wear within one metre of a coughing client/patient/resident

Gown

Wear a long-sleeved gown if contamination of uniform or clothing is anticipated

Gloves

- Wear gloves when there is a risk of hand contact with blood, body fluids, secretions, excretions, non-intact skin, mucous membranes or contaminated surfaces or objects
- Wearing gloves is NOT a substitute for hand hygiene
- Perform hand hygiene after removing gloves

Environment

- All equipment that is being used by more than one client/patient/resident must be cleaned between clients/patients/residents
- All touched surfaces in the client/patient/resident's room must be cleaned daily

Linen & Waste

Handle soiled linen and waste carefully to prevent personal contamination and transfer to other clients/patients/residents

Sharps Injury Prevention

- **NEVER RÉCAP USED NEEDLES**
- Place sharps in sharps containers
- Prevent injuries from needles, scalpels and other sharp devices

Client Placement/Accommodation

- Use a single room for a client/patient/resident who contaminates the environment
- Perform hand hygiene after leaving the room











APPENDIX II – FACT SHEET (C) SAMPLE SCREENING POSTER

IMPORTANT NOTICE TO OUR PATIENTS



Tell staff if you have a:

- Cough Sneeze • Fever • Cold
 - rever Gola
- Flu

Clean your hands with alcohol-based hand cleaner: when you arrive and before you leave after coughing or sneezing

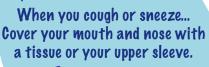


APPENDIX II – FACT SHEET (D) SCREENING QUESTIONNAIRE FOR FEBRILE RESPIRATORY ILLNESS (FRI)

EXAMPLE OF CLIENT/ RESIDENT SCREENING QUESTIONNAIRE
Date: Time: Name:
 Y □ N New or worsening cough Y □ N Shortness of breath (worse than usual) Y □ N Fever within the past 24 hours
CLINICIAN SHOULD CONSIDER DONNING PERSONAL PROTECTION EQUIPMENT IF FEVER, PLUS ONE OR TWO ABOVE CLIENT SYMPTONS, ARE PRESENT.
Client has reported the following symptoms: Y N Muscle aches Y N Severe fatigue, feeling unwell Y N Severe headache, (worse than usual) Y N New rash associated with fever Y N Recent travel to: Y N Contact with sick person with Hx of recent travel Notes:
Completed by: Download at: <u>http://www.peelregion.ca/health/professionals/index.htm</u> © 2005 Adapted from BC Centre for Disease Control

APPENDIX II – FACT SHEET (E) RESPIRATORY ETIQUETTE POSTER

Cough or Sneeze



Po not use your hand!



You may be asked to put on a surgical mask to protect others.



Put your used tissue or mask in the waste basket after use



You may be asked to sit in a 'cough corner' to stop the spread of germs.



APPENDIX II – FACT SHEET (F) INFECTION CONTROL CRITERIA FOR PURCHASE OF PERSONAL PROTECTIVE EQUIPMENT (PPE) FOR ROUTINE PRACTICES



The employer has the responsibility to provide employees, clients and visitors with protection against infectious materials. They are specifically designed for use when there is contact with blood, body fluids, secretions and excretions, draining wounds, mucous membrane and non-intact skin.

Choosing products should be based on the following criteria:

- (a) availability
- (b) safety and reliability
- (c) uniformity
- (d) cost-effectiveness

Educational materials and in-servicing when appropriate for proper use of the purchased PPE should be considered mandatory for all personal protective equipment. The extent of the education materials and in-servicing required is dictated by the particular equipment selected.

GLOVES

Gloves are not needed for every client care activity. Purchase of gloves is a major expense for any care facility. It is important to consider reliability, supply and suitability for the task. The cheapest glove is not always the most economical. Conversely, the most expensive glove is not always the highest quality.

Health Canada (1998) outlines criteria that should be considered when purchasing gloves. Gloves must be:

- Disposable, single use
- Approved for medical use to protect against exposure of blood, body fluids any other contaminates
- Available in multiple sizes: small, medium and large. Sizing must be appropriate to provide adequate protection. An ill-fitted glove can be a hazard for the health care worker resulting in impaired dexterity and possible needle stick injury
- Good quality (have a leakage rate of < 5%)
- Appropriate for the intended use non-sterile for routine practices and sterile for invasive procedures

 Available in dispensers that can be wall mounted for quick and easy access by health care workers, clients and visitors

Serious consideration should be given to the universal use of non-latex (vinyl or nitrile) and powder-free gloves to protect patients and staff against possible anaphylactic reactions to latex.

Separate purchase of sterile surgical gloves or reuseable general purpose gloves that are commonly used for cleaning and disinfection of environmental surfaces or for equipment cleaning (i.e. rubber gloves) should be considered.

Procedure gloves are meant to be an additional protective measure and are not a substitute for hand hygiene. Gloves need to be changed and hand hygiene practiced between clients, or when moving from one area on the body to another.

Gloves should be changed based on time and useage. They are used for a task with a client and then removed immediately to prevent transmission of disease-causing organisms. The risk of not only transmission but also contamination of surfaces within the environment exists with the improper use of gloves.

GOWNS

Disposable gowns may be preferable in a centre lacking laundry facilities, but cost may be prohibitive elsewhere.

The requirements for disposable or re-useable, washable gowns are similar.

Gowns used for routine client care must prevent contamination of uniforms and protect the skin of health care provid-

INFECTION CONTROL CRITERIA FOR PPE (CONTINUED)

ers from exposures to blood and body substances. Therefore, the gowns purchased must have the following features:

- Long sleeves with elasticized cuffs that fit snugly at the wrist
- Gowns must be long enough to cover front of clothing; multiple sizes
- Closures must be at the back to prevent accidental contamination if the gown falls open
- Closures at waist and neck
- If non-disposable, colour should differ from that of gowns used in the operating room for differentiation by laundry personnel
- Fluid resistant
- Re-useable gowns must be made of a fabric that can withstand washing at high temperatures

MASKS

Health Canada Guideline: "Masks and eye protection should be worn where appropriate to protect the mucous membranes of the eyes, nose and mouth during procedures and client care activities likely to generate splashes or sprays of blood, body fluids, secretions or excretions."

Masks must be:

- Products recommended by provincial and/or regional health authorities
- Large enough to cover nose and mouth with visor where appropriate (and eyes where appropriate)
- Available in several sizes
- Clearly labelled for use: Large Droplet: procedure mask, "surgical"
- Packaged with instructions that match Routine Practices and Transmission Based Protection terminology; colour coding to aid with distinction of use
- Comfortable
- In a supply format easily accommodated on isolation carts
- Latex-free
- Fluid resistant (most inclusive product)
- Easy to use (i.e. loops vs strings)
- User friendly: allows easy access to product with minimal hand contact with packaging and other contents
- Disposable

A variety of products may be necessary to accommodate different clinical environments.

EYE PROTECTION AND FACE SHIELDS

Eye protection and face shields are used to protect the mucous membranes of the eyes, nose and mouth during procedures and client care activities likely to generate splashes or sprays of blood, body fluids, secretions and excretions. Two types of product are generally available: goggles or eye shields which cover only the eyes and face shields which cover the entire face.

Eye/face protection must be:

- Comfortable
- Easy to use
- Durable during regular use
- Must fit over prescription glasses
- Compatible with masks used
- Without visual distortion
- Resistant to fogging
- Curved around the head to prevent side splashes
- Of sufficient length of shield that prevents splashing/spraying into the mouth (for face shields)
- Available in several sizes for good fit

In addition to the above, re-useable eye/face protection (Fine & Valenti, 2004) must:

- be easily maintained/disinfected
- be able to withstand the use of disinfectants without reducing visibility
- Have a clear protocol for cleaning and disinfection

Paediatric users must consider a product that doesn't "frighten" children such as goggles that are smaller while still being efficient, and having brightly coloured earpieces.

Different uses of the goggles/face shields must be considered. Several products may be necessary to meet the needs of all users – different departments such as dietary (the dish room where splashing is a problem), laundry, SPD, etc.

APPENDIX II – FACT SHEET (G) LAUNDRY



COLLECTION AND HANDLING

Except for linen from persons with a diagnosis of rare, viral, hemorrhagic fevers, all soiled linen should be handled in the same way for all clients/residents.

Linen should be handled with a minimum of agitation and shaking. Never place soiled linen on the floor.

If the clothes or linens are not soiled with blood or body fluids, sorting of clothes and linen may take place in the client/resident care area.

Heavily soiled linen should be rolled or folded to contain the heaviest soil in the centre of the bundle without contaminating your clothing. Large amounts of solid soil, feces or blood clots should be removed from linen with a gloved hand and toilet tissue and placed into a bedpan or toilet for flushing. Excrement should not be removed by spraying with water.

BAGGING AND CONTAINMENT

- Soiled linen should be bagged or put in a laundry cart/hamper at the site of collection
- Bags should be tied securely and not over-filled when transported by chute, cart, or hand
- Laundry carts or hampers used to collect or transport soiled linen need not be covered from an infection prevention perspective. Carts/ hampers should be cleaned after each use.
- After emptying them, linen bags should be washed after each use and can be washed in the same cycle as the linen contained in them

TRANSPORT

When a laundry chute is used, all soiled linen must be securely bagged and tightly closed.

Linen transported by cart should be moved in such a way that the risk of cross-contamination is minimized.

Clean linen should be transported and stored in a manner that prevents its contamination and ensures its cleanliness. Separate carts should be used for dirty and clean linens. When linens are commercially laundered, adequate separation of clean and dirty laundry in the truck is essential to ensure that there is no opportunity for mixing clean and dirty linens.

WASHING AND DRYING

High temperature (> 71.1°C) washes are necessary if cold water detergents are not used. An alternative is to use cold water and a cold water detergent. If low temperature water is used for laundry cycles, chemicals suitable for low temperature washing, at the appropriate concentrations, should be used.

Use complete wash and rinse cycles.

Use of a commercial laundry detergent with household bleach (according to product instructions and where suitable for fabrics) and a normal machine wash and machine dry are sufficient to clean soiled linen in a community living or home care setting.

Machine drying or hanging clothing and linens on a clothes line at the home care site are suitable methods for drying.

DRY CLEANING

Clothing containing blood, body fluids or excrement that is sent to a community dry cleaner should be appropriately labelled. Dry cleaning personnel should be knowledgeable of procedures to handle soiled clothing.

PROTECTION OF LAUNDRY WORKERS AND OTHERS HANDLING LAUNDRY

Workers should protect themselves from potential cross infection from soiled linen by wearing appropriate protective equipment (e.g. gloves and gowns or aprons) when handling soiled linen.

Personnel should wash their hands whenever gloves are changed or removed.

All caregivers and laundry workers should be trained in procedures for handling soiled linens.

Laundry workers, as other health care providers, should be offered Hepatitis B immunization.

INFECTION PREVENTION AND CONTROL BEST PRACTICES

FOR LONG TERM CARE AND COMMUNITY CARE INCLUDING HEALTH CARE OFFICES AND AMBULATORY CLINICS

APPENDIX II – FACT SHEET (H) PERSONAL CARE SUPPLIES - LONG TERM CARE RELATED



Residents can be reservoirs of pathogens such as antibiotic resistant organisms, bloodborne pathogens (Hepatitis B, C, and HIV) and others.

Personal care supplies, if shared, can result in transmission of these microorganisms to other residents and health care providers.

Prevention of transmission is of prime importance. The importance of ensuring that personal care supplies are **<u>not</u> <u>shared</u>** and are **<u>kept clean</u>** contributes to residents' safety and well-being.

Personal care supplies include items used for bathing, skin care, nail care, oral hygiene and denture care.

Included are the following items: lotions, creams, soaps, razors, toothbrush, toothpaste, denture box, comb and hairbrush, nail file and nail clippers and any other articles needed for personal hygiene.

PERSONAL CARE SUPPLIES SHOULD NOT BE SHARED BETWEEN RESIDENTS.

Each resident's personal care supplies should be identified with his/her name and kept at his/her bedside in a clean container (e.g. in a washable cosmetic bag or plastic container). Toothbrush and oral hygiene products should be kept in a separate bag.

Residents' personal care items must be sent with the resident when discharged.

PERSONAL CARE ITEMS SHOULD BE CLEANED REGULARLY

LOTIONS

Preferably, use lotions in a bottle with a pump and labelled with resident's name.

SOAPS

Bar soap must be kept in a clean, dry soap dish that allows the bar to drain between uses.

Personal liquid body wash is preferred because it is more easily stored between uses.

Each resident using an incontinence brief should have a personal incontinence care cleanser.

CREAMS

Use a tongue depressor to dispense cream from jar to avoid contaminating the cream.

TOOTHBRUSH

Change every three months and after an illness, keep in a plastic toothbrush container. Ensure it is stored protected from toilet aerosols.

DENTURE BOX Label, rinse and dry daily.

COMB AND HAIRBRUSH

Label, clean at the same time as hair is washed. Clean in hot soapy water, rinse and allow to air dry.

NAIL FILE AND CLIPPER Label, clean and dry after each use.

RAZORS

Clean **electric razors** after each use with a personal razor brush. Don't share.

Personal **disposable razors** can be used and must be disposed of in biomedical waste receptacles.

Sharing an electric razor between residents is not considered an acceptable practice in a health care facility because it doesn't respect the basic personal hygiene care measures and can expose the residents to the transmission of microorganisms and infection.

BEDPANS

Label with client's name and clean and disinfect after each use. Never place on the floor.

Disposable bedpans are acceptable.

BOWL FOR WASHING

Label with client's name, clean with soap and water and dry after each use.

APPENDIX II – FACT SHEET (I) STERILIZATION AND DISINFECTION



One of the most current guides to Sterilization and Disinfection of Medical Equipment and Devices is the publication: <u>Best Practices for Cleaning, Disinfection and Sterilization In All Health Care Settings</u> initially published April 2006 by Provincial Infectious Diseases Advisory Committee (PIDAC) MOHLTC.

To view this document in its entirety, please visit: <u>http://www.health.gov.on.ca/english/providers/program/infectious/diseases/best_prac/bp_cds_2.pdf</u>

The document provides a composite of the CSA standards, Public Health Agency of Canada Guidelines and CSAO recommendations with an audit tool to review practice in your area.

CONTENTS

- 1. Single-Use Medical Equipment/Devices
- 2. Purchasing and Assessing Medical Equipment/Devices and/or Products to be Subjected to Disinfection or Sterilization Processes
- 3. Education and Training
- 4. Written Policies and Procedures
- 5. Selection of Product/Process for Reprocessing
- 6. Environmental Issues
- 7. Occupational Health and Safety Issues
- 8. Factors Affecting the Efficacy of the Reprocessing Procedure
- 9. Transportation and Handling of Contaminated Medical Equipment/Devices
- 10. Disassembling and Cleaning Re-useable Medical Equipment/Devices
- 11. Disinfection of Re-useable Medical Equipment/Devices
- 12. Reprocessing Endoscopy Equipment/Devices
- 13. Sterilization of Re-useable Medical Equipment/Devices
- 14. Storage and Use of Reprocessed Medical Equpment/Devices

INFECTION PREVENTION AND CONTROL BEST PRACTICES FOR LONG TERM CARE AND COMMUNITY CARE INCLUDING HEALTH CARE OFFICES AND AMBULATORY CLINICS

APPENDIX II – FACT SHEET (J) THE USE OF GOWNS, APRONS, AND LAB COATS



WHY WEAR A GOWN, APRON OR LAB COAT?

Gowns, aprons or lab coats are used to help protect the skin and or clothing from coming in contact with blood /body fluids and secretions or excretions during client care or procedures. They are also used to reduce the risk of transmitting germs from client to client.

Choosing a gown, apron or lab coat depends on the type of exposure you will be having to a client or their environment.

WHAT IS THE DIFFERENCE BETWEEN GOWNS, **APRONS OR LAB COATS?**

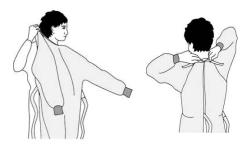
Gowns are worn to protect uncovered skin and prevent soiling of clothing during procedures and client care activities that will likely generate splashes or sprays of blood, body fluids, secretions or excretions. Gowns should be long sleeved and can be re-useable or disposable. They should be washed or thrown out between clients.

Aprons are used when limited contamination is likely, for example providing foot care. They are disposable and should be thrown out between clients.

Lab Coats are used to help protect street clothes, uniforms or skin. They provide good coverage when they are properly fastened. They should not be worn outside the area they are being used in, for example the lab. They should be cleaned on a regular basis.

HOW DO I CHOOSE WHICH PROTECTIVE APPAREL TO USE IN MY PRACTICE?

You should always assess the type of exposure you will be having and be prepared for all circumstances. Remember if you are unsure of your exposure it is better to be overprotected and wear a long sleeve gown!



HOW TO PUT ON A GOWN

The above diagrams are available to download from the CDC http://www.cdc.gov/ncidod/dhqp/ppe.html

TIPS TO REMEMBER WHEN WEARING A GOWN, APRON OR LAB COAT.

GOWNS

- Long enough to cover your clothing or uniform
- Should be long sleeved and cuffed
- Worn when contamination of the arms can be anticipated or in contact with clients who have epidemiological significant bacteria to reduce the risk of transmitting pathogens from clients or items in their environment to other clients or environments
- Put on with opening at back, tied at the • waist and neck
- Remove IMMEDIATELY if wet •
- Made of water resistant material and can • be re-useable or disposable
- Use only once •

APRONS

- Worn for short periods of time •
- Limited exposure is anticipated •
- Disposable
- Water proof
- Protects clothes

LAB COATS

- Worn to prevent contamination of street clothing and to protect the skin
- In labs, coats are worn to cover uniforms • and must not be worn outside the lab
- Should have a regular cleaning schedule



APPENDIX II – FACT SHEET (K) MEDICATION SAFETY POSTER



Contaminated Medication Vials Spread Infection

Did you know that contaminated medication vials can transmit Hepatitis B, Hepatitis C, HIV, Staph aureus and more?

Help prevent infection by following proper aseptic practices!

- Perform hand hygiene (use alcohol based hand rub or wash hands) before preparing and administering an injection.
- Use a sterile, single-use, disposable needle and syringe each time solution is to be withdrawn from a vial.
- Disinfect vial diaphragm with 70% alcohol and allow to air dry prior to inserting needle.
- If vial labelled as single use only, discard after first use.

 Store medication vial according to manufacturer's directions – in refrigerator or at room temperature.

• Do not administer medication from single-dose vials to multiple patients.

 Discard vial if sterility/stability of vial or its contents are in doubt or if breaks in aseptic technique occur.



Used with permission

APPENDIX III - AUDIT TOOL (A) LONG TERM CARE AUDIT

	COMMENTS																
	A\N																
	IMPLEMENTED NOT																
	РА RTLY IMPLEMENTED																
DATE:	FULLY IMPLEMENTED																
AUDIT PERFORMED BY D AREA AUDITED:	AREAS AND ITEMS	ENTRY TO FACILITY	Infection Control Signage at Entry (related to screening for communicable diseases)	Hand Hygiene Station at entrance	UNIT LEVEL	Client assessed before entry for risk factors (fever, cough, diarrhea, rash, drainage)	Written policy and procedure for client assessment Includes: drainage, cough, fever, continence, ability to follow hygiene measures	Protective equipment available	Gloves	Masks	Gowns	Alcohol-based hand rub stations	Goggles/eye protection	Cleaner for client equipment	Written Policies for Dress Code:	Includes no jewellery (rings or bracelets)	No nail enhancements

APPENDIX III - AUDIT TOOL (A) LONG TERM CARE AUDIT (CONTINUED)

AREAS AND ITEMS				COMMENTS
	семеитер.	CEMENTED	семеитер.	
	PAR: 1MP1 7ULL		IAMI A\N	
Signage for hand washing			_	
Signage for alcohol-based hand rub				
Signs showing how to wash hands				
Signs showing How to use alcohol-based hand rub				
Staff can identify when to use hand hygiene:				
Before resident care				
Before aseptic practices				
After resident care				
After contact with body fluids or mucous				
membranes				
After contact with contaminated equipment				
Resident equipment has regular cleaning schedule				
Commodes				
BP Cuffs				
Slings				
Glucometers				
Cleaners used are appropriate and used according to				
manufacturer's recommendations				
concentration contact time				
Clean procedures use sterile supplies				
e.g. Wound care				
Catheterization				
Resident Personal Care Equipment is labeled				

APPENDIX III - AUDIT TOOL (A) LONG TERM CARE AUDIT *(continued)*

AREAS AND ITEMS				COMMENTS	
	FULLY IMPLEMENTED PARTLY	NOT	ІМРLEMENTED	A/N	
LAUNDRY					
Laundry is transported in a clean manner					
Soiled laundry in sealed bags					
Clean in segregated manner					
Laundry					
Hand hygiene is available in laundry area					
protective practice					
Immunization is offered to laundry workers for					
Hepatitis B					
WASTE					
Puncture Resistant Sharps containers are used					
Written policies reflect waste segregation					
Sharps containers not more than 3/4 filled					
Sharps containers are accessible and safe					
HEALTHY WORKPLACE					
Documentation of staff tubercline skin tests are kept					
Documentation of staff immunization is kept:					
Flu Shots					
MMR					
TDP					
HepB					

APPENDIX III - AUDIT TOOL (A) LONG TERM CARE AUDIT *(CONTINUED)*

	AREAS AND ITEMS	NTED	NTED	NTED		COMMENTS
		ΙΜΡΓΕΜΕΙ Γυγγ	РАRTLY IMPLEMEI	IMPLEMEI NOT	∀/N	
	Written policies outline work exclusions: Dermatitis on hands					
	Disseminated shingles					
	Initial days of a cold					
[4	Diarrhea			<u> </u>		
21	Eye infection until treated			<u> </u>		
	Written policy outlines Bloodborne Pathogen Follow-					
	up (Sharps Injury or blood splash)					
	Education is provided to staff annually on Infection					
	prevention and Control					
	Education is provided on risk assessment, routine				_	
	practices and equipment cleaning					
	Rate of Staff Flu vaccination year					
	Rate of Resident Flu vaccination					
	OUTBREAK MANAGEMENT					
	Written policies identify notification process for					
	clusters of symptoms or outbreaks					
	Written policies and procedures exist for managing					
	outbreaks					
	Including tools for tracking cases					
	and a communication plan					

APPENDIX III – AUDIT TOOL (B) EMERGENCY RESPONSE FACILITIES (EMS) AUDIT

DATE:	
UDIT PERFORMED BY	REA AUDITED:

_	ITEMS					COMMENTS
		EULLY IMPLEMENTED	PARTLY IMPLEMENTED	IMPLEMENTED NOT	A\N	
_	Biological risk assessment taught		-			
	Hand wash sinks available in station					
43]	Hand hygiene stations available in field					
_	PPE- appropriate gloves (Nitrile or work)					
-	Masks surgical/N95					
-	Face shields					
_	Protective clothing					
_	Sharps safety: containers available					
_	Safety engineered IV					
-	Safety engineered syringes					
	CLEAN EQUIPMENT					
_	Cleaning protocols for pt. Equipment					
_	Disinfectant or germicide available					
_	Single use items for critical devices					
_	Medication vials accessed safely and labelled					
_	Cleaning protocol for vehicles					
_	CLEAN ENVIRONMENT					
_	Refrigerator cleaned monthly and documented					
_	Separate refrigerator for meds and food					
-	Protocol for cleaning soiled protective gear if re-useable					

FOR LONG TERM CARE AND COMMUNITY CARE INCLUDING HEALTH CARE OFFICES AND AMBULATORY CLINICS INFECTION PREVENTION AND CONTROL BEST PRACTICES

APPENDIX III – AUDIT TOOL (B) EMERGENCY RESPONSE FACILITIES (EMS) AUDIT (CONTINUED)

ITEMS					COMMENTS
	FULLY IMPLEMENTED FULLY	РАВТLY IMPLEMENTED	IMPLEMENTED NOT	A/N	
WASTE					
Sharps are disposed of properly in puncture proof					
containers					
HEALTHY WORKPLACE					
Documentation of staff mantoux tests kept					
Documentation of staff immunization kept					
Flu Shots					
MMR					
Hep B					
TDP					
Chickenpox Immunity					
Written work exclusion policy for:					
Dermatitis on hands					
Disseminated shingles					
Diarrhea					
Written policy on Bloodborne Pathogen Follow-up					
STAFF TRAINING					
Annual staff training or updating completed on					
Infection Prevention					
Annual staff training on proper PPE use					

FOR LONG TERM CARE AND COMMUNITY CARE INCLUDING HEALTH CARE OFFICES AND AMBULATORY CLINICS INFECTION PREVENTION AND CONTROL BEST PRACTICES

APPENDIX III – AUDIT TOOL (C) HEALTH CARE OFFICE AUDIT

DATE:	
>	
AUDIT PERFORMED BV	IDITED:
AUDIT PI	AREA AUDITED:

ILEMS				COMMENIS
	PULLY IMPLEMENTED PARTLY	IMPLEMENTED NOT IMPLEMENTED	A/N	
WAITING ROOM				
infection control signs at entry				
Infection Control Signs at reception desk				
Alcohol-based hand cleaner at Reception with signage				
Tissue Boxes available				
Garbage Cans available				
Patient Segregation Area				
Clean Toy and soiled toy bins available				
No office toy policy signs				
RECEPTION				
Personal Protective Equipment (PPE) available				
Patient Masks				
Staff fluid resistant masks				
Staff gloves				
Reception staff can maintain 1 metre distance with				
Tolonhono crroning arotocol has hoon douglonod				
rereprione screening protocol has been developed and implemented				
EXAMINATION/CONSULTATION ROOMS				
Handwashing sinks with soap available in all rooms				
Exam rooms only have essential supplies				

FOR LONG TERM CARE AND COMMUNITY CARE INCLUDING HEALTH CARE OFFICES AND AMBULATORY CLINICS INFECTION PREVENTION AND CONTROL BEST PRACTICES

APPENDIX III - AUDIT TOOL (C) HEALTH CARE OFFICE AUDIT (CONTINUED)

					COMMENTS
					COMIMENIO
	IMPLEMENTED FULLY	РАRTLY IMPLEMENTED	IMPLEMENTED NOT	A/N	
Exam room air exchange meets or exceeds six internal and two outside air exchanges per hour					
Written policies exist for decontaminating exam					
CLEANING PROCEDURES					
Written protocols and procedures for cleaning the office setting have been provided by the cleaning contractor					
Approved and appropriate disinfectant products are available for patient surfaces					
Approved and appropriate disinfectant products are available for equipment and instruments					
PROTOCOL DEVELOPMENT AND STAFF TRAINING					
Annual staff training or updating completed on Infection Prevention					
Annual staff training on proper PPE use					
DISINFECTION/STERILIZATION OF MEDICAL DEVICES					
Manufacturer's instructions are followed					
Process for cleaning semi-critical and critical devices					
including written procools for. disassembly					
sorting and soaking					
physical removal or organic material					
rinsing					
physical inspection and wrapping					

APPENDIX III - AUDIT TOOL (C) HEALTH CARE OFFICE AUDIT (CONTINUED)

ITEMS	NTED	NTED	NTED		COMMENTS
	IMPLEME FULLY	РА RTLY ІМРLEME	IMPLEME NOT	∀/N	
Sterilization must follow manufacturer's					
recommendations					
Internal and external indicators must be used with					
sterilization					
Biological indicators must be used daily					
Recording of indicators must be done					
High level disinfection must be done according to					
manufacturer's recommendations					
Product used for high level disinfection must have a					
DIN number					

APPENDIX III - AUDIT TOOL (D) HOME HEALTH CARE AUDIT

AREAS AND ITEMS					COMMENTS
	PLEMENTED	PLEMENTED RTLY	PLEMENTED T	1	
	IMI		IWI ON	ď/N	
RISK ASSESSMENT					
Screening done before visits (FRI)					
Phone script available for use					
Standardized client assessment used					
RISK REDUCTION					
Hand Hygiene products available and used					
Written policy on hand hygiene requires no hand jewellery					
No nail enhancements					
Supplies that may be required for risk reduction					
Alcohol-based hand rub (60-90% alcohol)					
Hand lotion or cream					
One way valve resuscitation mask (only if staff required to be CPR certified)					
Non sterile exam gloves					
Impermeable gown or apron					
Surgical mask (with visor)					
Sharps container					
Sterile gloves if required					
70% ethyl alcohol wipes or other disinfectant					
Antimicrobial soap if required					
Blood spill kit					

APPENDIX III - AUDIT TOOL (D) HOME HEALTH CARE AUDIT (CONTINUED)

AKEAS AND ITEMS	PLEMENTED	PLEMENTED	D D L E M E M E M E M E M E M E M E M E M E	COMMENTS
		IMI	IWI .ON	A\N
Written guidelines available on:				
When to wear protective equipment				
Cleaning and disinfection of equipment if moving client to client				
Waste disposal				
Paundry Laundry				
Requiring mantoux testing of staff based on local recommendations				
Maintaining cold chain on vaccines and multidoes vials				
Sterilization if autoclave used for foot care instruments or other patient equipment				
Documentation of staff/volunteers mantoux status and immunization status (or natural immunity as required)for:				
Influenza				
MMR				
TDP				
Hepatitis B				
Written Guidelines on work exclusions:				
Dermatitis on hands				
Disseminated shingles				
Initial days of respiratory infection				
Fever				
Diarrhea				
Eye infection until treated				

	Y CLINICS
	MBULATORY
	AND A
	OFFICES
	CARE
INFECTION PREVENTION AND CONTROL BEST PRACTICES	FOR LONG TERM CARE AND COMMUNITY CARE INCLUDING HEALTH CARE OFFICES AND AM
ST PR	LUDIN
L BE	EINC
TRO	CAR
NOD GN	AIMUNITY
N AP	CON
VTIO	AND
EVE	CARI
N PR	TERM
TIOI	DNG
NFEC	OR L

)

APPENI HOV	AREAS

HOME HEALTH CARE AUDIT (CONTINUED)	UED)				
AREAS AND ITEMS	IMPLEMENTED FULLY	РАRTLY IMPLEMENTED	IMPLEMENTED NOT	A/N	COMMENTS
Verify employee immunity before assigning to client with communicable disease.					
Written guideline outlining Bloodborne pathogen follow up (eg. Sharps injury or bodyfluid splash).					
Documentation of annual education programs on:					
Hand Hygiene					
Risk assessment and risk reduction including proper use of PPE					
Documentation of education on cleaning and disinfection of patient equipment					
Standardized Client education information available on:					
Hand Hygiene					
Hygiene in the home					
Safe Sharps disposal					
AROS					
Managing Diarrhea Respiratory Etiquette					
Immunization					
Self screening					
Safe disposal of waste					
Written guideline of what needs to be reported to Health Unit (identify reportable diseases for your area)					
Identify resources available to manage infectious diseases and staff safety					

APPENDIX IV CORE COMPETENCIES FOR INFECTION PREVENTION AND CONTROL FOR HEALTH CARE PROVIDERS

SOURCE: CHICA-CANADA ENDORSED

TARGET AUDIENCE

Individuals who are accountable for the quality of health care delivered in Canada.

TABLE 2:

CORE COMPETENCIES IN INFECTION PREVENTION AND CONTROL FOR ALL HEALTH CARE PROVIDERS

AREA OF COMPETENCY	DETAILED CORE COMPETENCY
Critical Assessment Skills These skills are the under-pinning for the other five core competencies	Critical assessment skills related to exposure to infectious agents, awareness to local outbreaks and use of infectious disease specific protocols
Basic Rationale for Routine Practices	Understands basic microbiology and how infections can be transmitted in health care settings
Personal Safety	Knows how to appropriately manage sharps, blood and body fluids and recognizes the appropriate first aid activities for exposures to blood and body fluids [.]
	Understands the role of vaccines in preventing certain infections, including annual influenza immunizations for health care workers
Routine Practices	Understands the importance of hand hygiene/hand washing
	Understands the activities of Routine Practices/ Standard Precautions
	Respiratory Etiquette
	Knows and selects appropriate Personal Protective Equipment (PPE) for their job(s)
	Demonstrates appropriate use of PPE

INFECTION PREVENTION AND CONTROL BEST PRACTICES FOR LONG TERM CARE AND COMMUNITY CARE INCLUDING HEALTH CARE OFFICES AND AMBULATORY CLINICS

CORE COMPETENCIES TABLE (CONTINUED)

AREA OF COMPETENCY	DETAILED CORE COMPETENCY
Cleaning, Disinfection, Sterilization/ Waste	Maintains safe clean environment
Management	Understands importance of using PPE when sorting laundry
	Recognizes that re-useable equipment that has been in direct contact with a patient should be cleaned and reprocessed before use in the care of another patient
	Appreciates the differences between clean, disinfected (low, medium, and high-level) and sterile items
	Knows the difference between regular and biohazard wastes
Additional Precautions	Understands Transmission Based Precautions (Additional Precautions): why and when they are used

REFERENCES

MAIN REFERENCES USED FOR THIS DOCUMENT:

Public Health Agency of Canada. Prevention and Control of Occupational Infections in Health Care. 2002

Public Health Agency of Canada. Routine Practices and Additional Precautions for preventing the transmission of Infection in Health Care. 1999

Public Health Agency of Canada. Hand Hygiene and Cleaning, Disinfection and Sterilization. 1997

BC Centre of Disease Control. Guidelines for Infection Prevention and Control in the Physician's Office. 2004

The College of Physicians and Surgeons of Ontario. Infection Control in the Physician's Office . 2004

Rhinehart, E and Friedman. Infection Control in Home Care. Association for Professionals in Infection Control and Epidemiology, Inc. 2006.

Prevention and Control of Occupational Infections in Health Care, Canada Communicable Disease Report (CCDR) ISSN 1148-4169, Vol. 2851, March 2002

Baker, Ross et al. The Canadian Adverse Events Study: The Incidence of Adverse Events Among Hospital Patients in Canada. *Canadian Medical Asociation Journal* 25 May 2004 pg 1678.

Henderson, E et al. Infection Prevention and Control Core Competencies for Health Care Workers: A Consensus Document. *Canadian Journal of Infection Control* Vol 21 No.1 Spring 2006 pg.62.

REFERENCES USED FOR INFECTION CONTROL CRITERIA FOR PURCHASE OF PPE FOR ROUTINE PATIENT CARE PRACTICES

- Bearman, G.M.L., & Edmond, M. (2004). Isolation. In E. Lautenbach & K. Woeltje (Eds.), *Practical Handbook for Healthcare Epidemiologists* (pp.143-150). Thorofare: Slack.
- Fine, L.S., Valenti, W.M. (2004). Product Evaluation. In E. Lautenbach & K. Woeltje (Eds.), *Practical Handbook for Healthcare Epidemiologists* (pp.329-335). Thorofare: Slack.
- Garner, JS. and The Hospital Infection Control Practices Advisory Committee. Guideline for Isolation Precautions in Hospitals (1994 with revisions 1996, 2004).
- Gershon, R.M., Quireshi, K.A., Grimes, M.J., & Mckenzie, J. (2004). Evaluating and selecting products that have infection control implications. In C.G. Mayhall (Ed.), *Hospital Epidemiology and Infection Control* 3rd Edition (pp.1747-1752). Philadelphia: Lippincott Williams & Wilkins.
- Health Canada. Infection Control Guidelines (1998). Hand Washing, Cleaning, Disinfection and Sterilization in Healthcare. CCDR (Supplement): 8-9.
- Health Canada. Infection control Guidelines (1999). Routine Practices and Addititional Precautions for Techniques CDR 25 (Supplemental 4): 1-142. <u>http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/99vol25/25s4/index.html</u>.
- Health Canada. Prevention and Control of Occupational Infections in Health Care (2002). CCDR 28 (Supplement 1). <u>http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/02vol28/28s1/index/html</u>

REFERENCES USED FOR PERSONAL CARE SUPPLIES FACT SHEET:

Routine practices and additional precautions for preventing the transmission on Infection in Health Care, Health Canada Laboratory centre for disease control

Avis de la Santé et des Services Sociaux du Québec :

« Utilisation des rasoirs électrique en Centre d'hébergement et de soins de longue durée ainsi que dans les autres établissements de soins du Québec, » juin 2001

Infection Control in Long-term Care Facilities, 2nd edition Philip W. Smith, MD, Delmar publishers Inc. 1994

REFERENCES USED IN THE USE OF GOWNS, APRONS AND LAB COATS FACT SHEET:

Guidance for the Selection and Use of Personal Protective Equipment (PPE) in Healthcare Settings <u>http://</u> <u>www.cdc.gov/ncidod/dhqp/ppe.html</u> May 2004

Centers for Disease Control and Prevention. Guidelines for Infection Control in Dental Health-Care Settings — 2003. MMWR 2003;52(No. RR-17):[inclusive page numbers]. Pg 16& 17

Laboratory Biosafety Guidelines 3rd edition 2004 Chapter 3 Handling Infectious Substance

Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care - Revision of Isolation and Precaution Techniques. 1999

APIC Text of Infection Control and Epidemiology, 2005 Edition

Guidelines for Isolation Precautions in Hospitals Hospital Infection Control Advisory Committee Julia S. Garner, RN, MN; the Hospital Infection Control Practices Advisory Committee Publication date: 01/01/1996