FNIHB-OR Infection Prevention and Control Policy and Procedure Manual

Introduction

The purpose of this manual is to provide infection prevention and control (IPAC) policies and procedures to First Nation and Inuit Health – Ontario Region (FNIHB-OR) Health Care Providers (HCPs). IPAC is a standard of practice that over arches all disciplines of health care programs. It should be noted that at the current time, this manual does not include IPAC information related to construction and renovation of health care facilities, nor the reprocessing of dental instruments or equipment. However, dental program policies and procedures for reprocessing instruments and equipment are available in a separate document.

Objectives

The objectives of the Infection Prevention and Control Policy and Procedure Manual are:

- 1. To identify infection prevention and control best practices appropriate for First Nations Inuit Health Branch (FNIHB) Nursing Stations and Community Health Centres
- 2. To consolidate IPAC best practices for all HCPs into a policy and procedure manual tailored to health care delivery in First Nation communities
- 3. To set a standard of practice for infection prevention and control that will be implemented by all HCPs

Target Group

The contents of this manual are targeted for use by Health Canada First Nation and Inuit Health Branch health care providers who deliver health care services to First Nation communities throughout Ontario Region.

Types of Facilities

Among the facilities providing health services to First Nations communities in Ontario, there are Community Health Centres and Nursing Stations (facilities providing both ambulatory and emergency/urgent care to remote or isolated communities where there is no hospital). Despite the different types of health care being provided, IPAC practices are generic to all types of health care settings.

Companion Manual for Environmental Cleaning

The policies and procedures in Section 8.0 (Environmental Cleaning) of this manual should be used in conjunction with the companion manual, FNIHB-OR *Environmental Cleaning Procedure Manual*. The companion manual provides step-by-step procedures for cleaning shared non-critical medical equipment such as blood pressure cuffs, stethoscopes, otoscopes, ophthalmoscopes, oximetry monitors, crutches, basins, k - basins, stretchers, walkers, and wheel chairs that may be used by nurses and other HCPs during client care within the health facility.

Suggested Ways to use the IPAC Policy and Procedure Manual

- 1. Keep this manual in a readily available place as a reference on current IPAC best practices in the health care setting.
- 2. This manual should be used as part of the IPAC orientation for newly hired HCPs.
- 3. FNIHB staff should review this manual and could use this activity as part of their individual Learning and Development Plan within the Performance Management Agreement.
- Supervisors/managers can use the policies and procedures to audit IPAC best practices in the health care setting and to develop appropriate education plans for the HCPs they supervise/manage.
- 5. In order to use this manual to capacity, FNIHB HCPs should review the next section (Overview of the Chain of Transmission) of this manual as part of their orientation and/or Learning and Development Plan to understand the basic principles behind infection prevention and control and how it relates to all health care delivery by all health care providers.

The policies and procedures in this manual are primarily based on the Provincial Infectious Diseases Advisory Committee (PIDAC) Best Practice documents. The best practices in this manual reflect the best evidence available at the time of development. As new information becomes available, these policies and procedures will be reviewed and updated.

Keith Conn

Regional Executive

First Nations and Inuit Health Branch – Ontario Region

April 2017

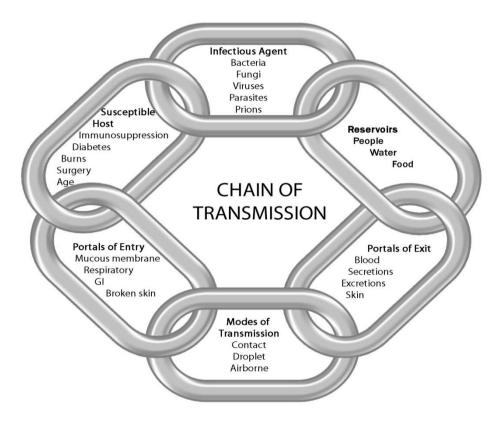
Overview of Chain of Transmission

The chain of transmission is a term or concept used to show how factors or "links" in a "chain" must be present in order for an infection or illness to occur. An infection can only happen if **all six links** in the chain are in place.

The six links in the chain of transmission are listed and shown in Figure 1. Each link of the chain is explained in more detail below the diagram.

- 1. Infectious agents
- 2. Reservoir
- 3. Portal of exit
- 4. Mode of transmission
- 5. Portal of entry
- 6. Susceptible host

Figure 1: The Chain of Transmission.



Source: PHO. (2012). Routine Practices and Additional Precautions

1. Infectious Agent

Infectious agents are capable of causing a disease after entering a person's body. The infectious agent can be a virus, bacteria, fungi, or parasite.

2. Reservoirs

The reservoir is a place where the infectious agent lives and may grow and multiply while it waits for an opportunity to be transmitted or passed along to another person or object. The reservoir can be a person, animal, insect, soil, water, or food. The most common reservoirs in the health care setting are people.

It is important to remember that you cannot always tell simply by looking at someone, whether or not they are carrying harmful germs (i.e. a "carrier"). Sometimes, people may or may not show signs of sickness or an infection. Similarly, the health care setting can be contaminated with microorganisms even when it may **look** clean. A clean appearance does not rule out the possibility that infectious agents are present. When an environment or equipment is not properly cleaned after each use, and the infectious agents are allowed to multiply, they can spread from room to room on our hands, gloves, clothing, or even on the actual cleaning equipment used.

3. Portals of Exit

The portal of exit is the path the infectious agent uses to leave the reservoir. In humans, portals of exit include blood, body fluids, and droplets of fluid expelled by coughing or sneezing.

4. Modes of Transmission

The mode of transmission is the way the infectious agent is transferred from the reservoir to the susceptible host. There are five modes of transmission and in the healthcare setting the most common modes are through direct and indirect contact:

a) Contact Transmission:

- Direct Person to Person Contact: This is the most common mode of transmission and can
 occur from skin to skin contact, especially from a person's hands following sneezing or
 coughing or following contact with an open wound.
- Indirect Contact: Hands pick up infectious agents from contaminated surfaces or equipment and then transfer the microorganisms to another person. This link in the chain of transmission can be broken with good environmental practices and the proper use of gloves and hand hygiene by all HCPs.
- **b) Droplet Transmission**: This involves a person who sneezes or coughs and expels droplets of germs which land on the membranes of someone else's eyes, nose or mouth. These droplets are heavy and usually travel no more than two metres (six feet) before falling to a surface e.g. influenzavirus
- c) **Airborne Transmission**: This happens when very small particles of the infectious agent are carried and suspended in the air. Anyone breathing that air may be at risk for those infections e.g. tuberculosis.

- **d) Common Vehicle Transmission**: This happens when items such as food, water or other substances such as medication are contaminated and multiple people are exposed to the item. In the health care environment, used cleaning cloths, bar soap, and toilets that are not cleaned properly could be common vehicles for germs to be transmitted.
- e) **Vector borne Transmission**: This happens when an animal or insect carries the infectious agent e.g. hantavirus. HCPs should watch for signs of mice, flies, and other pests in the health care facility and notify their supervisor or the nurse-in-charge immediately if they notice any infestations.

5. Portals of Entry

The portal of entry is the path the infectious agent uses to enter the susceptible host. In humans, portals of entry include broken skin, eyes, nose, mouth, and other open areas. Portals of entry may be the same as portals of exit.

6. Susceptible Host

A susceptible person is one who does not have the proper defenses, or strong enough immune system to fight off the infectious agent. We may all be at risk depending on circumstances, but there are certain factors that increase the risk of being a susceptible host such as:

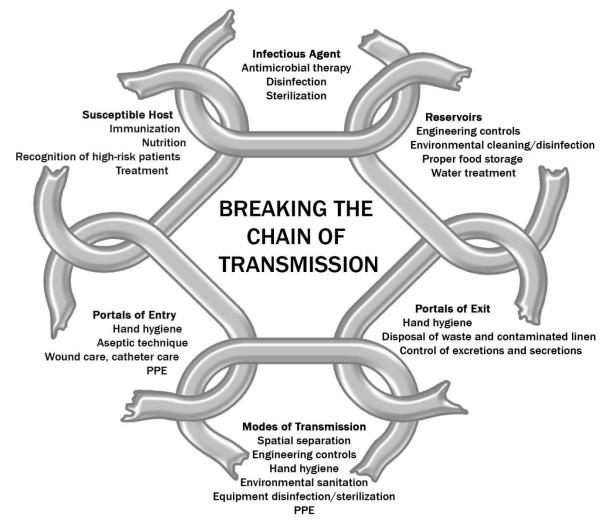
- a) Age (very young or very old)
- b) Underlying illness (e.g. diabetes and cancer may weaken the immune system)
- c) Lifestyle (e.g. poor nutrition and general health will make a person more susceptible)
- d) Inadequate immunization
- e) Those requiring hands-on care

BREAKING THE CHAIN OF TRANSMISSION

The goal of correct infection prevention and control principles is to break one or more links in the chain of transmission. The chain of transmission can lead to an infection **ONLY if ALL of its links** are in place. In order to stop the transmission of infectious agents, a link in the chain needs to be broken. Good hand hygiene, through frequent use of Alcohol-Based Hand Rub (ABHR) or hand washing with soap and water together with the use of gloves and other protective equipment are some easy ways to help break a link in the chain and therefore stop the spread of microorganisms that could cause infections. The term personal protective equipment (PPE) refers to such items as disposable gloves, gowns and masks with face protection. Personal protective equipment (PPE) is worn to protect the worker from infectious agents and cleaning products, and it also helps stop the spread of microorganisms from the environment to you and to other HCPs and clients. One must be careful to wash one's hands after removing PPE, for PPE can also contaminate hands and spread microorganisms

Figure 2 shows how each of the 6 links in the chain can be broken.

Figure 2: Breaking the Chain of Transmission.



Source: PHO. (2012). Routine Practices and Additional Precautions

Breaking the Chain of Transmission

1. Infectious agent

The following practices either reduce or eliminate the number of microorganisms present:

- a) Hand hygiene
- b) Routine cleaning
- c) Disinfection and/or sterilization of medical equipment and devices
- d) Disposable of single use medical equipment and devices

2. Reservoirs

It is important to contain and control the location (or reservoir) of the infectious agent through:

HEALTH CANADA

First Nations and Inuit Health Branch-Ontario Region

- a) Proper cleaning of the environment
- b) Proper handling of garbage and waste
- c) Disinfecting/sterilizing surfaces and equipment
- d) Discarding any food that may have been left out on the counter

3. Portals of Exit

Infection control practices break the chain at the point where the infectious agent leaves the reservoir:

- a) Hand hygiene
- b) Environmental cleaning
- c) Using personal protective equipment (PPE) to cover up portals of exit
 - o Ensuring coughs/sneezes are covered
 - o Covering wounds
 - o Safe disposal of body fluids

4. Modes of Transmission

Creating barriers and providing effective cleaning are ways to control the spread of infectious agents at this link in the chain.

Contact transmission is controlled by:

- a) Hand hygiene
- b) Personal protective equipment (PPE) such as disposable gloves, gowns and masks with face protection, and hand hygiene after removal of PPE
- c) Environmental cleaning
- d) Staff staying home when they are sick with something that may be infectious (e.g. rash, fever, cough or diarrhea)
- e) Placing clients who are coughing and sneezing in a separate room if possible

Droplet transmission is controlled by:

- a) Hand hygiene
- b) Covering your cough or sneeze (respiratory etiquette)
- c) Placing clients who are coughing and sneezing in a separate room if possible
- d) Maintaining a space of 2 metres from a coughing or sneezing person
- e) Using of personal protective equipment (PPE)
- f) Staff staying home when they are sick with something that may be infectious (e.g. rash, fever, cough or diarrhea)

Airborne transmission is controlled by:

- a) Hand hygiene
- b) Using personal protective equipment (PPE) with an N95 Respirator and eye protection. Other PPE may be required.
- c) Negative pressure rooms
- d) Excluding staff with an airborne infection from work
- e) Placing clients with a suspected airborne disease such as chickenpox, measles or tuberculosis in a separate room if possible

5. Portals of Entry

Using an effective barrier and other techniques can block the pathway by which the infectious agent can gain entry to the body, therefore breaking the chain.

- a) Hand hygiene
- b) Use of personal protective equipment (PPE)
- c) Prevent skin breakdown
- d) Safe use/handling of all sharps (needles etc.)

6. Susceptible host

A person can improve their chances of not becoming a susceptible host by:

- a) Keeping their immunizations up to date including annual influenza immunization
- b) Maintaining good eating habits
- c) Exercising regularly

SUMMARY

All HCPs working in all health care settings must ensure that they are aware of and practicing the proper techniques that reflect current IPAC best practices to mitigate the transfer of infectious agents within the health care setting. They must know how to handle and dispose of body fluids, biomedical waste, regular garbage, and sharps. HCPs must ensure that they are immunized against such diseases as hepatitis B, influenza, tetanus and other immunizations as recommended by the National Advisory Committee on Immunization (NACI), in order to protect themselves from getting vaccine preventable diseases. It is important to remember that diligent hand hygiene for health care providers and environmental cleaning personnel remains the single most important element in controlling the spread of infections. Ensuring personal protective equipment such as gloves and masks are worn when required also helps stop the spread of infectious diseases from the environment to you and to other HCPs and clients.

Ensuring that IPAC best practices are in place in each type of health care setting is the cornerstone of ensuring a safe health care environment for HCPs and clients. Preventing infection is everybody's responsibility and healthcare providers who practice good infection control principles can help break the chain of transmission.

REFERENCES

Emergency Health Services Branch: Ministry of Health and Long-Term Care. (2007). Infection Prevention and Control: Best Practices Manual for Land Ambulance Paramedics. Retrieved from: http://www.ambulance-

transition.com/pdf documents/infection prevention & control best practices manual.pdf

Provincial Infection Control Network of British Columbia. (2009). PICNet Infection Control Guidelines: Providing Health Care to the Client Living in the Community. Retrieved from: http://www.bccdc.ca/NR/rdonlyres/8DABC1C4-7FC6-4E0B-BB67-

F0B267FD8DE8/0/Epid GF PicNet Home Community Care August 2009.pdf

Public Health Ontario. (2012). Provincial Infectious Diseases Advisory Committee (PIDAC). Best Practice Manual: Routine Practices and Additional Precautions in all Health Care Settings. Retrieved from: http://www.publichealthontario.ca/en/eRepository/RPAP All HealthCare Settings Eng2012.pdf

Public Health Ontario. (2012). Environmental Cleaning Toolkit. Retrieved from: http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental_Cleaning_Toolkit.aspx

Public Health Agency of Canada (PHAC). (2013). Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care Settings. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html

Glossary of Terms

Acute Respiratory Infection (ARI): Any new onset acute respiratory infection that could potentially be spread by the droplet route (either upper or lower respiratory tract), which presents with symptoms of a fever greater than 38°C and a new or worsening cough or shortness of breath (previously known as *febrile respiratory illness*, or FRI). It should be noted that elderly people and people who are immunocompromised may not have a febrile response to a respiratory infection.

Additional Precautions (AP): Precautions (i.e. contact precautions, droplet precautions, airborne precautions) that are necessary in addition to Routine Practices for certain pathogens or clinical presentations. These precautions are based on the method of transmission (e.g. contact, droplet, airborne).

Administrative Controls: Measures put in place to reduce the risk of infection to staff or to clients (e.g. infection prevention and control policies/procedures, education/training).

Aerosol: Small droplet of moisture that may carry microorganisms. Aerosols may be light enough to remain suspended in the air for short periods of time, allowing inhalation of the microorganism.

Airborne Infection Isolation Room (AIIR): A room that is designed, constructed and ventilated to limit the spread of airborne microorganisms from an infected occupant to the surrounding areas of the health care setting. This is also known as a negative pressure room. NOTE: The Canadian Standards Association uses the term Airborne Isolation Room, abbreviated ARI.

Airborne Precautions: Used in addition to Routine Practices for patients known or suspected of having an illness transmitted by the airborne route (i.e. by small droplet nuclei that remain suspended in the air and may be inhaled by others).

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

Antibiotic-Resistant Organism (ARO): A microorganism that has developed resistance to the action of several antimicrobial agents and that is of special clinical or epidemiological significance.

Antiseptic: An agent that can kill microorganisms and is applied to living tissue and skin.

Audit: A systematic and independent examination to determine whether quality activities and related results comply with planned arrangements, are implemented effectively and are suitable to achieve objectives.

Barriers: Equipment or objects used to prevent exposure of skin, mucous membranes or clothing of staff to splashes or sprays of potentially infectious materials.

Biomedical Waste: Contaminated, infectious waste from a clinical office setting that requires treatment prior to disposal in landfill sites or sanitary sewer systems. Biomedical waste includes human anatomical waste; human and animal cultures or specimens (excluding urine and faeces); human liquid blood and blood products; items contaminated with blood or blood products that would release liquid or semi-liquid

blood if compressed; body fluids visibly contaminated with blood; body fluids removed in the course of surgery, treatment or for diagnosis (excluding urine and faeces); sharps; and broken glass which has come into contact with blood or body fluid.

Body Fluid: Any body fluid containing visible blood and all body fluids with the capability of transmitting hepatitis B (HBV), hepatitis C (HCV) and /or HIV, i.e. seminal fluid, vaginal secretions, cerebral spinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, amniotic fluid and tissues.

Chain of Transmission: A model used to understand the infection process.

Cleaning: Involves the physical removal of foreign material (e.g. dust, soil) and organic material (e.g. blood, secretions, excretions, microorganisms). Cleaning physically removes rather than kills microorganisms. It is accomplished with water, detergents and mechanical action.

Client/Patient: Anyone receiving health care within a health care setting.

Clostridium difficile (CDI): A gram positive, spore-forming, anaerobic bacillus. It is widely distributed in the environment and colonizes up to 3-5% of adults without causing symptoms. Certain strains can produce two toxins: toxin A and toxin B, which are responsible for diarrhea.

Cluster: A grouping of cases of a disease within a specific time frame and geographic location, suggesting a possible association between the cases with respect to transmission.

Colonization: The presence and growth of microorganisms in or on a body with growth and multiplication but without tissue invasion or cellular injury. The individual will be asymptomatic and not considered infected.

Contact Precautions: Used in addition to Routine Practices to reduce the risk of transmitting infectious agents via contact with an infectious person.

Contamination: The presence of an infectious agent on hands or on a surface such as clothes, gowns, gloves, bedding, toys, surgical instruments, client care equipment, dressings or other inanimate objects.

Critical Medical Equipment/Devices: Medical equipment/devices that enter sterile tissues, including the vascular system (e.g. biopsy forceps, foot care equipment, dental hand pieces, etc.).

Cytotoxic Waste: Waste cytotoxic drugs, including leftover or unused cytotoxic drugs and tubing, tissues, needles, gloves and any other items which have come into contact with a cytotoxic drug.

Dangerous Goods: A product, substance, or organism that could present a hazard to persons or the environment in the event of a spill or leak.

Decontamination: The process of cleaning, followed by the inactivation of microorganisms, in order to render an object safe for handling.

Detergent: A synthetic cleansing agent that can emulsify oil and suspend soil. A detergent contains surfactants that do not precipitate in hard water and may also contain protease enzymes and whitening agents.

Diagnostic Specimen: Any human or animal material, including but not limited to excreta, secreta, blood and its components, tissue and tissue fluid swabs, that is handled, offered for transport or transported for the purpose of diagnosis. Specimens suspected of containing or known to contain an infectious substance can NOT be transported as a diagnostic specimen.

Direct Care: Providing hands-on care (e.g. bathing, washing, turning client, changing clothes, continence care, dressing changes, care of open wounds/ lesions, toileting).

Disinfectant: A product that is used on surfaces or medical equipment/devices which results in disinfection of the surface or equipment/device. Disinfectants are applied only to inanimate objects. Some products combine a cleaner with a disinfectant.

Disinfection: The inactivation of disease-producing microorganisms. Disinfection does not destroy bacterial spores. Medical equipment/devices must be cleaned thoroughly before effective disinfection can take place.

Droplet Precautions: Used in addition to Routine Practices for patients known or suspected of having an infection that can be transmitted by large infectious droplets.

Drug Identification Number (DIN): In Canada, disinfectants are regulated as drugs under the *Food and Drugs Act* and Regulations. Disinfectant manufacturers must obtain a drug identification number (DIN) from Health Canada prior to marketing, which ensures that labelling and supporting data have been provided and that it has undergone and passed a review of its formulation, labelling and instructions for use.

Endemic: A disease or condition that normally occurs within a population or geographic area.

Engineering Controls: Physical or mechanical measures put in place to reduce the risk of infection to staff or patients (e.g. heating, ventilation and air conditioning systems, room design, placement of hand washing sinks).

Environment of the Client: The immediate space around a client that may be touched by the patient and may also be touched by the health care provider when providing care. The client environment includes equipment, medical devices, furniture (e.g. bed, chair), telephone, and the bathroom that the client uses.

Environmental Health Officer: EHOs provide advice, guidance, education, public health inspections and recommendations to First Nations and their leadership to help them manage public health risks associated with the environment.

Epidemic: The occurrence of more cases of a disease than expected in a given population and place during a specified time period.

Exposed Health Care Worker (HCW): Any person carrying on activities in the health facility who has had an exposure to blood-borne pathogens; this exposure may be through percutaneous injury from a contaminated needle or other sharp object, a splash onto a mucous membrane or non-intact skin, or a human bit that breaks the skin. Such an injury together with blood or a body fluid capable of transmitting hepatitis B (HBV), hepatitis C (HCV), and/or HIV must be present for a HCW to be exposed. Other infectious exposures are dependent on the proximity of exposure, and may include consideration of whether personal protective equipment (PPE) was worn, immunity and/or immunization status.

Eye Protection: A device that covers the eyes and is used by health care workers to protect the eyes when it is anticipated that a procedure or care activity is likely to generate splashes or sprays of blood, body fluids, secretions or excretions, or within two metres of a coughing patient. Eye protection includes safety glasses, safety goggles, face shields and visors.

Facial Protection: Personal protective equipment that protect the mucous membranes of the eyes, nose and mouth from splashes or sprays of blood, body fluids, secretions or excretions. Facial protection may include a mask or respirator in conjunction with eye protection, or a face shield that covers eyes, nose and mouth.

Fit-Test: A qualitative or quantitative method to evaluate the fit of a specific make, model and size of respirator on an individual. Fit-testing shall be done periodically, at least every two years and whenever there is a change in respirator face piece or the user's physical condition which could affect the respirator fit.

Fomites: Objects in the inanimate environment that may become contaminated with microorganisms and serve as vehicles of transmission.

Hand Care: Actions and products that reduce the risk of skin irritation.

Hand Care Program: A hand care program for staff is a key component of hand hygiene and includes hand care assessment, staff education, occupational health assessment if skin integrity is an issue, provision of hand moisturizing products and provision of alcohol-based hand rub that contains an emollient.

Hand Hygiene: A general term referring to any action of hand cleaning. Hand hygiene relates to the removal of visible soil and removal or killing of transient microorganisms from the hands. Hand hygiene may be accomplished using soap and running water or an alcohol-based hand rub (ABHR). Hand hygiene includes surgical hand antisepsis.

Hand Hygiene Moment: The point(s) in an activity at which hand hygiene is performed. There may be several hand hygiene moments in a single care sequence or activity.

Hand Hygiene Indication: The reason why hand hygiene is necessary at a given moment.

Hand Washing: The physical removal of microorganisms from the hands using soap (plain or antimicrobial) and running water.

Health Care-Associated Infection (HAI): A term relating to an infection that is acquired during the delivery of health care (also known as *nosocomial infection*).

Health Care Environment: People and items which make up the care environment (e.g. objects, medical equipment, staff, clients) of a hospital, clinic or ambulatory setting, outside the immediate environment of the client.

Health Care Facility: A set of physical infrastructure elements supporting the delivery of health related services. A health care facility does not include a client's home.

Health Care Provider (HCP): Any person delivering health care services. A HCP can also be referred to as a Health Care Worker (HCW). They can include but are not limited to nurses, dental hygienists, physicians, dentists, pharmacists and other related and regulated health professions including Environmental Health Officers (EHO) employed by Health Canada FNIHB.

Health Care Setting: Any location where health care is provided, including settings where emergency care is provided, community health centres and clinics, dental offices, and home health care.

High-Level Disinfection (HLD): The level of disinfection required when processing semi-critical medical equipment/devices. High-level disinfection processes destroy vegetative bacteria, mycobacteria, fungi and enveloped (lipid) and noon-enveloped (non-lipid) viruses, but not necessarily bacterial spores. Medical equipment/devices must be thoroughly cleaned prior to high-level disinfection.

High-Touch Surfaces: High-touch surfaces are those that have frequent contact with hands. Examples include doorknobs, light switches, and wall areas around the toilet and edges of privacy curtains.

Hospital Clean: The measure of cleanliness routinely maintained in client care areas of the health facility. Hospital Clean is "Hotel Clean" with the addition of disinfection, increased frequency of cleaning, auditing, and other infection control measures in client care areas.

Hotel Clean: A measure of cleanliness based on visual appearance that includes dust and dirt removal, waste disposal and cleaning of windows and surfaces. Hotel clean is the basic level of cleaning that takes place in all areas of a health facility.

Hospital-Grade Disinfectant: A low-level disinfectant that has a drug identification number (DIN) from Health Canada indicating its approval for use in Canadian hospitals.

Hydrogen Peroxide Enhanced Action Formulation (HP-EAF): A formulation of hydrogen that contains surfactants, wetting agents and chelating agents. The resulting synergy makes it a powerful oxidizer that can rapidly achieve broad-spectrum disinfection for environmental surfaces and non-critical devices. A second concentration (2–7%) has a sporicidal claim.

Immunization: Immunization, also called vaccination, refers to the injection or other agents (e.g. nasal spray, oral drops) that are given to boost a person's immune system for protection against certain infections. Immunization helps the body recognize and fight a particular infection before the person gets sick.

Infection: The entry and multiplication of an infectious agent in the tissues of the host. Asymptomatic or sub-clinical infection is an infectious process running a course similar to that of clinical disease but below the threshold of clinical symptoms. Symptomatic or clinical infection is one resulting in clinical signs and symptoms (disease).

Infectious Agent: A microorganism i.e. a bacterium, fungus, parasite, virus or prion, which is capable of invading body tissues, multiplying and causing infection.

Infection Prevention and Control (IPAC): Evidence-based practices and procedures that, when applied consistently in health facility settings can prevent or reduce the risk of infection in clients, health care providers and visitors

Low-Level Disinfectant: A chemical agent that achieves low-level disinfection when applied to surfaces or items in the environment.

Low-Level Disinfection (LLD): Level of disinfection required when processing non-invasive medical equipment (i.e. non-critical equipment) and some environmental surfaces. Equipment and surfaces must be thoroughly cleaned prior to low-level disinfection.

Low-Touch Surfaces: Surfaces that have minimal contact with hands. Examples include walls, ceilings, mirrors, and window sills.

Manufacturer: Any person, partnership or incorporated association that manufactures and sells medical equipment/devices under its own name or under a trade mark, design, trade name or other name or mark owned or controlled by it.

Mask: A device that covers the nose and mouth and is secured in the back. It is used by health care providers to protect the mucous membranes of the nose and mouth.

Material Safety Data Sheet (MSDS): A document that contains information on the potential hazards (health, fire, reactivity and environmental) and how to work safely with a chemical product. It also contains information on the use, storage, handling and emergency procedures all related to the hazards of the material. MSDSs are prepared by the supplier or manufacturer of the material.

Medical Equipment/Device: Any instrument, apparatus, appliance, material, or other article, whether used alone or in combination, intended by the manufacturer to be used for human beings for the purpose of diagnosis, prevention, monitoring, treatment or alleviation of disease, injury or handicap; investigation, replacement, or modification of the anatomy or of a physiological process; or control of conception.

Mode of Transmission: The method by which infectious agents spread from one person to another (e.g. contact, droplet or airborne route).

Moistened Towelette: Single-use, disposable towelette that is pre-moistened, usually with a skin antiseptic (e.g. alcohol), that is used to physically remove visible soil from hands in situations where running water is not available.

Monitoring: A planned series of observations or measurements of a named parameter (e.g. monitoring cleaning of a client room).

Methicillin-Resistant *Staphylococcus aureus* (MRSA): MRSA is a strain of *Staphylococcus aureus* that has a minimal inhibitory concentration (MIC) to oxacillin of ≥ 4 mcg/ml and contains the mecA gene coding for penicillin-binding protein 2a (PBP 2a). MRSA is resistant to all of the beta-lactam classes of antibiotics, such as penicillins, penicillinase-resistant penicillins (e.g. cloxacillin) and cephalosporins. MRSA has been associated with health-care-association infections and outbreaks.

National Advisory Committee on Immunization (NACI): Provides the Public Health Agency of Canada with ongoing and timely medical, scientific, and public health advice relating to immunization.

N95 Respirator: A personal protective device that is worn on the face and covers the nose and mouth to reduce the wearer's risk of inhaling airborne particles. A NIOSH-certified N95 respirator filters particles one micron in size, has 95 per cent filter efficiency and provides a tight facial seal with less than 10 per cent leak.

HEALTH CANADA

First Nations and Inuit Health Branch-Ontario Region

Noncritical Medical Equipment/ Device: Equipment/device that either touches only intact skin (but not mucous membranes) or does not directly touch the client. Reprocessing of noncritical equipment/devices involves cleaning and may also require low-level disinfection (e.g. blood pressure cuffs, stethoscopes).

Pandemic: The Public Health Agency of Canada defines a pandemic as "an epidemic disease of widespread prevalence around the globe."

Personal Protective Equipment (PPE): Clothing or equipment worn by staff for protection against hazards.

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

Point-of-Care Risk Assessment (PCRA): A PCRA is the health care provider's (HCPs) evaluation of the likelihood of exposure to an infectious agent for a specific interaction, with a specific client in a specific environment under available conditions to be able to choose the appropriate actions/PPE needed to minimize the risk of exposure for the specific client, other clients in the environment, HCPs, visitors, etc.

Portal of Entry: The anatomic site at which microorganisms get into the body, i.e. mucous membranes of nose, mouth and broken skin.

Portal of Exit: The anatomic site at which microorganisms leave the body, i.e. secretions and excretions that exit the respiratory tract, gastrointestinal tract or broken skin.

Provincial Infectious Diseases Advisory Committee (PIDAC): A multidisciplinary scientific advisory body that provides to the Chief Medical Officer of Health evidence-based advice regarding multiple aspects of infectious disease identification, prevention and control. More information is available at: http://www.publichealthontario.ca.

Public Health Agency of Canada (PHAC): A national agency which promotes improvement in the health status of Canadians through public health action and the development of national guidelines. The PHAC website is located at: http://www.phac-aspc.gc.ca

Public Health Ontario (PHO): Public Health Ontario is the new operating name for the Ontario Agency for Health Protection and Promotion (OAHPP).

Regional Infection Control Networks (RICN): The RICN of Ontario coordinate and integrate resources related to the prevention, surveillance and control of infectious diseases across all health care sectors and for all health care providers, promoting a common approach to infection prevention and control and utilization of best-practices within the region.

Reprocessing: The steps performed to prepare reusable medical equipment for use (e.g. cleaning, disinfection, sterilization).

Reservoir: Any person, animal, substance or environmental surface in which an infectious agent survives or multiplies, posting a risk for infection.

Respirator: See N95 respirator

Respiratory Etiquette: Personal practices that help prevent the spread of bacteria and viruses that cause acute respiratory infections (e.g. covering the mouth when coughing, care when disposing of tissues).

Risk Assessment: An evaluation of the interaction of the health care provider, the client and the client environment to assess and analyze the potential for exposure to infectious diseases.

Routine Practices (RP): The system of IPAC practices to be used with all clients during all care to prevent and control transmission of microorganisms in all health facilities. For a full description of Routine Practices, refer to PIDAC's *Routine Practices and Additional Precautions for all Health Care Settings*.

Safety-Engineered Medical Device: A non-needle sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces exposure incident risk. Safety-engineered devices shall be licensed by Health Canada.

Seal-Check: A procedure that the health care provider must perform each time an N95 respirator is worn to ensure it fits the wearer's face correctly to provide adequate respiratory protection. The health care provider shall receive training on how to perform a seal-check correctly.

Sharps: Objects capable of causing punctures or cuts (e.g. needles, lancets, sutures, blades, clinical glass).

Staff: Persons employed by Health Canada FNIHB who are conducting health care related activities in settings where health care is provided to First Nation communities. See also *Health Care Providers*.

Sterilization: The level of reprocessing required when processing critical medical equipment/devices. Sterilization results in the destruction of all forms of microbial life including bacteria, viruses, spores and fungi. Equipment/devices must be cleaned thoroughly before effective sterilization can take place.

Surgical Hand Antisepsis: The preparation of hands for surgery, using either antimicrobial soap and water or an alcohol-based hand rub, preferably with sustained antimicrobial activity.

Susceptible Host: An individual who is at risk for infection.

TDG Regulations (TDGR): Transportation of Dangerous Goods Regulations published by Transport Canada provides Road Regulations for transporting dangerous goods in Canada. The Transportation of Dangerous Goods Act (1992) is federal legislation designed to regulate the movement of dangerous goods via roads, rail, air, and ship within Canada.

Tuberculin Skin Test (TST): A skin test that is used to identify whether a person has delayed-type hypersensitivity reaction to tuberculin antigens.

Vaccine: Vaccines are highly regulated, complex biologic products designed to induce a protective immune response both effectively and safely.

Vancomycin-Resistant Enterococci (VRE): Strains of *Enterococcus faecium* or *Enterococcus faecalis* that have a minimal inhibitory concentration (MIC) to vancomycin of \geq 32 mcg/ml. and/ or contain the resistance genes *vanA* or *vanB*.

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

Workplace Hazardous Materials Information System (WHMIS): Canada's national hazard communication standard. The key elements of the system are cautionary labelling of containers of WHMIS 'controlled products', the provision of Material Safety Data Sheets (MSDSs) and staff education and training programs.

SECTION 1: HEALTHY WORKPLACE

Section 1: **Healthy Workplace** Policy number: **1.1**

Subject: Staff Immunization Issued: September 2015

Distribution: All FNIHB Staff Revised:

1 PURPOSE

1.1 The purpose of this policy is to outline expectations for immunization of HCPs employed by First Nations and Inuit Health Branch (FNIHB – Ontario Region). HCPs' adherence to immunization requirements and recommendations is the most effective method of controlling vaccine preventable diseases.

1.2 The purpose of the policy is to:

- 1.2.1 Protect the personal health of staff (including some of those who, unknown to colleagues, may be in a high-risk category) and ensure workplace safety in compliance with the Occupational Health Assessment Guide and Canada Labour Code, Canadian Immunization Guide, and the OHA/OMA Communicable Disease Surveillance Protocols.
- 1.2.2 Protect clients that receive direct services from staff.
- 1.2.3 Ensure the ability of FNIHB to provide a prepared unit of staff to respond to emergency events or disease outbreaks including pandemic.

2 POLICY

- 2.1 All FNIHB OR staff are expected to maintain up-to-date immunization status as outlined in the current edition of the Health Canada Occupational Health Assessment Guide (OHAG) Annex O and as recommended by the National Advisory Committee on Immunization (NACI) (Canadian Immunization Guide, current edition).
- 2.2 The immunization status of each worker will be assessed at the time of initial employment. A full vaccination history should be elicited and efforts made to obtain documentation of the doses received and dates of administration. Persons who cannot provide acceptable information or evidence of adequate immunity should be offered immunization. These records are submitted to the Public Service Occupational Health Program.
- 2.3 Staff will be expected to provide an up-to-date immunization record to prevent occupational exposure to the worker in the event of a facility or community outbreak of a vaccine preventable disease.
- 2.4 Health Canada will reimburse the employee for the costs of any recommended vaccines that are not publicly funded in Ontario.

3 PROCEDURE

3.1 New Employees

- 3.1.1 Upon hire, new FNIHB OR employees are advised of current recommendations for immunizations as outlined in the Health Canada Occupational Health Assessment Guidelines (OHAG) Annex O (Immunization) Section 2-1-1 and 2-1-5 and as recommended by the National Advisory Committee on Immunization (NACI) (Canadian Immunization Guide, current edition)
- 3.1.2 The Public Service Occupational Health Program (PSOHP) may require the employee to have a pre-employment medical assessment and to have their recommended immunizations and immunity assessed and updated accordingly by their family physician or designated Health Canada physician. The pre-employment medical is returned to the PSOHP.

3.2 Current Employees

3.2.1 In the event of a risk exposure to the health care worker, or a community outbreak of a vaccine preventable disease, upon request, the staff member will be expected to provide an up-to-date immunization record.

3.3 Recommended Immunizations

3.3.1 All employees are expected to be up to date with their adult routine immunizations as outlined in the Health Canada Occupational Health Assessment Guide (OHAG) Annex O current edition and as recommended by NACI in the Canadian Immunization Guide, current edition. Evidence of immunity must be recorded in the HCP's OHS health record.

NOTE: Please refer to the Canadian Immunization Guide, current edition for further information on each antigen.

Table 1: Recommended Immunizations

TETANUS-	• All HCPs should be immune to tetanus /diphtheria and receive a booster	
DIPHTHERIA	dose of Td vaccine every 10 years	
	######################################	
	(Source: CIG Part 4: Active Vaccines – Tetanus Toxoid / Diphtheria)	
PERTUSSIS	All HCPs, regardless of age, should receive a single dose of Tdap vaccine	
LICTOSSIS		
	for pertussis protection if not previously received in adulthood, even if not	
	due for a tetanus and diphtheria booster	
	(Source: CIG Part 4: Active Vaccines – Pertussis Vaccine)	
MEASLES	All HCPs should be immune to measles as documented by:	
	• Evidence of receiving 2 doses of measles-containing vaccine with dates on	
	or after their 1 st birthday	
	OR	
	Laboratory evidence of immunity	
	OR	
	History of laboratory confirmed measles disease	
	(Source: CIG Part 4: Active Vaccines – Measles Vaccine)	
MUMPS	All HCPs should be immune to mumps as documented by:	
	• Evidence of receiving 2 doses of mumps-containing vaccine with dates on	
	or after their 1 st birthday	
	OR	
	Laboratory evidence of immunity	
	OR	
	 History of laboratory confirmed mumps disease 	
	(Source: CIG Part 4: Active Vaccines – Mumps Vaccine)	
RUBELLA	All HCPs should be immune to rubella as documented by:	
	• Evidence of receiving 1 dose of rubella-containing vaccine with dates on	
	or after their 1 st birthday	
	OR	
	Laboratory evidence of immunity	
	OR	
	History of laboratory confirmed rubella disease	
	(Source: CIG Part 4: Active Vaccines – Rubella Vaccine)	
VARICELLA	All HCPs should be immune to varicella as documented by:	
	History of laboratory confirmed varicella disease. Diagnosis of varicella or	
	herpes zoster by a health care provider based on clinical presentation or a	
	self-reported history of varicella is not reliable to be considered immune	
	OR	
	Serologic testing to document immunity	
	OR	
	 Documentation of 2 doses of varicella vaccine is required for susceptible 	
	•	
	adults	
	(Source: CIG Port A: Active Vessines, Vericelle Vessine)	
1	(Source: CIG Part 4: Active Vaccines – Varicella Vaccine)	

HEPATITIS B (HB)	HCPs who may be exposed to blood or blood products, or are at risk of injury by instruments contaminated by blood, or are at risk of bites or penetrating injuries, should be immune to Hepatitis B. If this documentation is not available, FNIHB - OR will offer Hepatitis B immunization to the HCP. If a HCP has documentation of receiving a complete HB vaccine series but does not have documentation of anti-HBs serology following immunization, request serological testing for anti-HBs to determine immunity. OR If a HCP reports HB immunization but has no or incomplete documentation of HB immunization, serologic testing for anti-HBs should be performed to determine immunity:
	• If anti-HBs titre of ≥ 10 IU/L is confirmed, testing need not be repeated, nor should further immunization be undertaken with the exception of immunocompromised persons (See CIG for more information)
	• If testing for anti-HBs is done 1 to 6 months after vaccination and the anti-HBs titre is < 10 IU/L, this may indicate a primary vaccine failure and the HCP should be given a second vaccine series and tested 1 to 6 months after completion of the second series.
	• If the HCP is tested > 6 months after the initial series and the anti-HBs titre is < 10 IU/L this may indicate a primary vaccine failure or waning antibody. The HCP should receive 1 booster dose and be retested 1 month later to document an anamnestic response; if the anti-HBs titre is still < 10 IU/L then complete the second vaccine series is indicated followed by anti-HBs titre 4 to 8 weeks after completing the second series.
	• HCPs who have documented evidence of failure to respond to 2 series of HB vaccine (i.e. anti-HBs titre of < 10 IU/L) are unlikely to benefit from further immunization and will need passive immunization (HBIG) after potential exposure to HB.
	(Source: CIG Part 4: Active Vaccines – Hepatitis B)
INFLUENZA	Annually for all health care providers in facilities and community settings who, through their activities, may be exposed to persons with influenza, or are capable of transmitting influenza to those at high risk of influenza complications. Vaccination of HCPs is considered an essential component of the standard of care for HCPs to protect their clients.
	(Source: PHAC NACI Statement on Seasonal Influenza Vaccine for 2016-17)

4 REFERENCES

Centers for Disease Control and Prevention. (2011). Morbidity and Mortality Weekly Report. (RR07). 1-45

Health Canada. (2002). Prevention and Control of Occupational Infections in Health Care: An Infection Control Guideline. CCDR 2002; 28S1:1-264

Immunization Action Coalition. (2012). Healthcare Personnel Vaccination Recommendations. Retrieved from: http://www.immunize.org/catg.d/p2017.pdf

Ontario Hospital Association. (2014). Communicable Disease Surveillance Protocols. Measles; Mumps; Rubella; Pertussis; Varicella; Blood Borne Diseases. Retrieved from: http://www.oha.com/Services/HealthSafety/Pages/CommunicableDiseasesSurveillanceProtocols.aspx

Public Health Agency of Canada. (2012). Canadian Immunization Guide. Retrieved from: http://www.phac-aspc.gc.ca/publicat/cig-gci/p04-eng.php

Public Health Agency of Canada. National Advisory Committee on Immunization (NACI). An Advisory Committee Statement on Seasonal Influenza Vaccine for 2016-2017: Retrieved from http://www.phac-aspc.gc.ca/naci-ccni/flu-2016-grippe-eng.php

Service Ontario. (2011). Occupational Health & Safety Act. Retrieved from: http://www.e-laws.gov.on.ca/html/statutes/english/elaws-statutes-90001 e.htm

Section 1: **Healthy Workplace** Policy number: **1.2**

Subject: Staff Tuberculin Skin Test Issued: September 2015

Screening/Assessment

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

- 1.1 The purpose of this policy is to ensure that all applicable staff employed by First Nations and Inuit Health Branch (FNIHB Ontario Region) have a current assessment of their tuberculin skin test status and/or tuberculin skin test on file prior to commencing employment.
- 1.2 The purpose of this policy is to also ensure that all current FNIHB staff who are at risk for exposure to tuberculosis in the normal performance of their duties, have a tuberculin skin test (TST) and/or assessment and any follow up as indicated after a known exposure to tuberculosis (TB).

2 POLICY

2.1 HCPs hired by FNIHB will have an assessment of their current tuberculin skin test status and/or have a tuberculin skin test completed prior to commencing employment. The request for baseline TST status is based on their work assignment as identified by FNIHB - OR and requested through the Public Service Occupational Health Program (PSOHP) as per Occupational Health Assessment Guide (OHAG) Annex G and O, and as outlined in the Canadian Tuberculosis Standards current edition.

3 PROCEDURE

3.1 New Employees

- 3.1.1 Upon hire, all new FNIHB OR employees are advised of the current recommendations for a tuberculin skin test (TST) for "Occupational Requirements of FNIHB Nurses Assigned to Isolated Posts in Northern First Nations Communities" and "Occupational Medical Assessment for Federal Nurses in a Clinical Role" as outlined in the Health Canada Occupational Health Assessment Guide (OHAG) and the Canadian Tuberculosis Standards, current edition.
- 3.1.2 The Public Service Occupational Health Program (PSOHP) requests the employee to have a pre-employment medical which includes a tuberculin status assessment and baseline two step tuberculin skin test, if indicated, either with a designated Health Canada physician or the employee's family physician.

- 3.1.3 The physician or designate performs the baseline TST as per the Canadian TB Standards current edition and documents the results on the employee's pre-employment medical.
- 3.1.4 The employee will have a chest x-ray if the employee has:
 - 3.1.4.1 A previous documented positive TST
 - 3.1.4.2 Previous treatment for active TB or
 - 3.1.4.3 Previous preventive treatment for Latent TB Infection (LTBI)
- 3.1.5 The pre-employment medical and documentation of current tuberculin status are returned to the PSOHP.

3.2 Current Employees:

- 3.2.1 In the event of a risk exposure to the health care worker, the staff member will be expected to know their TST status and to follow up with their physician for further assessment
- 3.2.2 TST contact follow up may be indicated after a known exposure. Contact follow up should be done as per the Canadian Tuberculosis Standards, current edition.

4 REFERENCES

Health Canada. (2012). Health Canada's Strategy Against Tuberculosis for First Nations On-Reserve. Retrieved from:

http://www.hc-sc.gc.ca/fniah-spnia/alt_formats/pdf/pubs/diseases-maladies/tuberculos/tuberculos-strateg/fact-fiche-eng.pdf

Ontario Hospital Association. (2014). Communicable Disease Surveillance Protocols. Tuberculosis. Retrieved from

 $http://\underline{www.oha.com/Services/HealthSafety/Pages/CommunicableDiseasesSurveillanceProtocols.aspx}$

Public Health Agency of Canada. (2013). Canadian Tuberculosis Standards. (7th edition). Retrieved from: http://www.respiratoryguidelines.ca/sites/all/files/Canadian_TB_Standards_7th_Edition_ENG.pdf

Service Ontario. (2011). Occupational Health & Safety Act. Retrieved from: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90001_e.htm

Revised:

Section 1: **Healthy Workplace** Policy number: **1.3**

Subject: Health Care Provider Issued: September 2015

Occupational Exposure to Blood and

Distribution: All FNIHB Staff

1 PURPOSE

Body Fluids

1.1 FNIHB Health Care Providers (HCPs) who have potential contact with blood and/or body fluids have an occupational risk of acquiring infection with hepatitis B virus (HBV), hepatitis C virus (HCV) and/or human immunodeficiency virus (HIV), the causative agent of acquired immunodeficiency syndrome (AIDS). The purpose of this policy is to provide guidelines on interventions that prevent or minimize the transmission of these and other infectious diseases when caring for clients and/or handling blood and body fluids.

2 POLICY

- 2.1 In order to limit exposures and to reduce the transmission of blood borne disease in the workplace, HCPs must treat all blood and body fluids as potentially infectious and utilize Routine Practices and Additional Precautions at all times.
 - 2.1.1 Routine Practices are based on the premise that all blood, body fluids, excretions and secretions are potentially infectious, even when the client is asymptomatic. Routine practices requires that a risk assessment be performed prior to each client contact and intervention, and that personal protective equipment be applied **routinely** with **all** clients encounters where it is anticipated the HCP may be exposed to, or may contact blood, body fluids, secretions, excretions, mucous membranes, non-intact skin or soiled items and to prevent the spread of microorganisms. Hand hygiene, and routine cleaning of equipment after use by one client before and use by the next client are also important components of Routine practices. (Refer to Section 3.0: Routine Practices and Section 4.0: Additional Precautions).
- 2.2 FNIHB HCPs may be at risk of exposure to bloodborne illnesses due to the nature of their activities. Exposure to blood borne pathogens may occur as a result of injuries from sharps (such as needles, syringes, blades, lancets, clinical glass and any other clinical items that may be contaminated with blood or body fluids that could cause a cut, puncture or abrasion), human bites that break the skin, or splashing of blood and body fluids onto a mucous membrane. Exposure may also extend to personnel handling waste, garbage, linens or sharps where inadvertently a sharp may not have been disposed of in a sharps container.
- 2.3 Blood and body fluids refer to blood, semen, vaginal secretions, pleural, amniotic, pericardial, peritoneal, synovial, cerebrospinal fluids, and saliva. Feces, nasal secretions, sputum, tears, urine, and vomitus are not implicated in the transmission of HBV, HCV, or HIV unless visibly contaminated with blood.

First Nations and Inuit Health Branch-Ontario Region

- 2.4 An exposed staff member refers to any person carrying on activities in the workplace who has been exposed to blood-borne pathogens; this exposure may be through exposure to the blood or body fluids of clients through injury from a contaminated needle or other sharp object, a splash onto a mucous membrane or non-intact skin, or a human bite that breaks the skin. Such an injury together with blood or a body fluid capable of transmitting HBV, HCV and/or HIV must be present for a HCP to be exposed. (Adapted from OHA/OMA Communicable Disease Surveillance protocols Blood-Borne Diseases p. 19 and APIC Infection Control in Ambulatory Care p.148)
- 2.5 Pre-exposure hepatitis B immunization is the most effective step in preventing transmission of HBV. All FNIHB HCPs are expected to meet current immunization recommendations and to maintain up-to-date immunization status as outlined in the current edition of the Health Canada Occupational Health Assessment Guidelines (Refer to Appendix 1 OHAG Annex O-1 July 2012) and as recommended by the National Advisory Committee on Immunization (NACI) Canadian Immunization Guide, current edition available at http://www.phac-aspc.gc.ca/publicat/cig-gci/p04-eng.php
 - 2.5.1 Hepatitis B immunization is strongly recommended pre-placement for all FNIHB HCPs who may be <u>at risk</u> for exposure to blood or blood products, including but not limited to those HCPs who may be administering or performing injectable medications, venipuncture, STI testing, wound care, foot care, mouth care, and/or handling blood and body fluid specimens, sharps or instruments. FNIHB will reimburse costs of hepatitis B vaccination for those FNIHB HCPs who are at increased risk of exposure.
 - 2.5.2 As per NACI recommendations, individuals who are immunized with hepatitis B vaccine for work-related purposes should have a blood test one to six months after the series to establish antibody response. (Refer to Appendix 1 OHAG Annex O-1 July 2012). If an antibody titer has not been completed in the past, it should still be assessed and, if antibody levels are insufficient, the individual should be boosted once and retested. (Refer to Appendix 1 OHAG Annex O-1 July 2012 and the online chapter of the Canadian Immunization Guide Part 4 Active Vaccines, Hepatitis B vaccine)
- 2.6 Blood work to be performed as soon as possible post exposure for the exposed person may include the following, depending on risk factors:
 - 2.6.1 Immunity and antibody testing for Hepatitis B, C, and HIV; and ALT.

3 PROCEDURE

- 3.1 Immediate First Aid:
 - 3.1.1 When a HCP is exposed to blood or body fluids from a known or unknown source, the HCP should initiate immediate first aid that should include:
 - 3.1.1.1 Allow the wound to bleed freely.
 - 3.1.1.2 Cleanse the wound thoroughly with soap and water.
 - 3.1.1.3 If contact is with mucous membranes (eyes, nose, or mouth), flush well with water.

- 3.1.1.4 Remove clothing that is contaminated by blood/body fluids.
- 3.1.1.5 Assess immunization and immunity status of HCP including tetanus and hepatitis B status.

NOTE: While not considered an exposure requiring Post Exposure Prophylaxis (PEP), splashes and spills of blood/body fluids onto **intact** skin should be washed well with soap and water. The larger the area of skin exposed and the longer the time of contact, the more important it is to verify that all of the relevant skin area is intact.

- 3.2 Risk Assessment of Exposure Incident:
 - 3.2.1 The exposed worker will be assessed by a physician to determine the need for prophylaxis and follow-up. When a community physician is not available in remote and isolated areas, the employee may contact the Regional Community Medicine Specialist for advice. It may be necessary for the worker to obtain further assessment outside of the community. Refer to Appendix 3: Table 1: Recommended HIV postexposure prophylaxis (PEP) for percutaneous injuries and Table 2: Recommended HIV postexposure prophylaxis (PEP) for mucous membrane exposures and non-intact skin exposures
 - 3.2.2 The risk assessment will determine the significance of the injury by considering the following:
 - 3.2.2.1 Type of vehicles capable of transmitting HBV, HCV, or HIV from an infected individual, including:
 - 3.2.2.1.1 Needles, sharps, razors, etc. that have been in contact with the fluids listed below
 - 3.2.2.1.2 Laboratory specimens containing HBV, HCV, or HIV
 - 3.2.2.1.3 Infected organ donations
 - 3.2.3 Types of body fluids capable of transmitting HIV, HBV and HCV

Table 1: Types of body fluids capable of transmitting HIV, HBV and HCV

Body Fluid	HIV	HBV	HCV
Blood and other fluids visibly contaminated with blood	Yes	Yes	Yes
Pleural, amniotic, pericardial, peritoneal, synovial, cerebrospinal and inflammatory exudates	Yes	Yes	Yes
Semen and vaginal secretions	Yes	Yes	Yes – if blood is present
Saliva	No – unless contaminated with blood	Yes	No – unless contaminated with blood
Organ and tissue transplants	Yes	Yes	Yes

Breast milk	Yes	Plausible – particularly if nipples are cracked or bleeding. Neonates given hepatitis B immune globulin or HBV vaccine are not at risk	Plausible – particularly if nipples are cracked or bleeding but the risk of transmission is very low. Breastfeeding is recommended for HCV infected mothers.
Feces, nasal secretions, sputum, sweat, tears, urine, vomitus	No, unless contains visible blood	No, unless contains visible blood	No, unless contains visible blood

Adapted from Blood & Body Fluid Exposure Management Tool August 2016, BC Centre for Disease Control

Table 2: Average per Act Occupational Risk of Transmission for HIV, HBV and HCV from an Infected Source Based on Exposure Route*

Exposure Route	HIV	HBV	HCV
Percutaneous Injury	0.3% (3 in 1000)	6-30% (6-30 in 100)	1.8% (18 in 1000)
Mucous Membrane	0.09% (9 in 10,000)	Not quantified	Not quantified
Exposure			
Non-intact Skin Exposure	Not quantified,	Not quantified	Not quantified
_	estimated at < 0.09%		

^{*}Average percent per exposure event

Adapted from: Manitoba Communicable Disease Branch. (2009) Communicable Disease Management Protocol – Integrated Post-exposure Protocol for HIV, HBV and HCV: Guidelines for Managing Exposures to Blood and Body Fluids. Table 2 page 10.

3.2.4 Significance of the Exposure

- 3.2.4.1 To be considered a **SIGNIFICANT EXPOSURE** the exposure must come in contact with body fluids capable of transmitting HBV, HCV, or HIV by way of:
 - 3.2.4.1.1 Deep percutaneous injury
 - 3.2.4.1.2 Visible blood present on the device associated with the exposure
 - 3.2.4.1.3 Exposure from a procedure which involved a needle placed directly into the source's vein or artery
 - 3.2.4.1.4 Large-bore hollow needle, scalpel, other sharp device or razor
 - 3.2.4.1.5 Non-intact skin, i.e. chapped skin or other open dermatological conditions
 - 3.2.4.1.6 Mucous membrane, i.e. splash into eyes, nose, mouth (See Appendix 2: Health Canada, OHAG Document Annex Q)

3.2.4.2 Exposure to blood or body fluids (capable of transmitting HBV, HIV or HCV) on **INTACT SKIN** is not considered a significant exposure.

NOTE: If the exposure incident did not involve a body fluid capable of transmitting HIV, HBV or HCV, further evaluation for PEP is not indicated.

- 3.3 Prophylaxis for a SIGNIFICANT EXPOSURE:
 - 3.3.1 If the treating physician feels there was **significant exposure** then s/he recommends prophylaxis. If uncertain whether exposure was significant, s/he will contact an Infectious Disease Specialist for further advice and up to date information regarding prophylaxis. Prophylaxis should be started within two hours to offer the best chance of preventing HIV transmission, but can be started later with lesser chance of success. (Refer to Appendix 2 OHAG Document ANNEX Q)
 - 3.3.2 Testing of Source (Refer to Appendix 2: OHAG Document ANNEX Q)Every reasonable effort should be made to obtain permission to test the source for HBV, HCV, or HIV. Obtaining informed consent is a mandatory component of pre and post-testing for the source person.
 - 3.3.3 When consent is given to draw blood for testing for all three viruses, the appropriate pre and post-test counseling for all three blood borne pathogens must be given. Information re HIV pre-test counseling is available at http://www.ohsutp.ca/uploads/Ontario_HIV_Testing_guidelines.pdf Information re Hep C counselling is available at http://www.hepcinfo.ca/en/detail/testing/counselling-information
 - 3.3.4 Maintenance of strict confidentiality and protection of privacy of all information for all clients and employees involved is absolutely essential.
 - 3.3.5 If results of the patient's test(s) are negative, no further follow up is usually required. However, if the patient is at high clinical or epidemiological risk for HBV, HCV or HIV infection, ensure that the exposed person receives counselling about the possible risk of infection and prevention of transmission of blood-borne diseases.
 - 3.3.6 Label all requisitions NEEDLESTICK or EXPOSURE TO BLOOD/BODY FLUIDS to ensure priority testing, and indicate SOURCE.

Table 3: Source Risk Factors of Blood Borne Pathogens

Blood Borne Pathogen	Risk Factor
HBV	Consider high-risk if the source: • Practices high-risk sexual behaviour (i.e. men who have sex with men, sexual partner who is an injection drug user (IDU), multiple sexual partners) • Is a sexual partner of HBV infected persons or persons practicing high-risk behaviour • Has a history of injection drug use • Comes from a highly endemic region

HCV	Consider high-risk if lifetime risk factors of source include: High-risk sexual behaviour (i.e. a sexual partner who is an IDU, long term sexual partner who is HCV infected) Injection drug use Receipt of blood or blood products before 1000
	 Receipt of blood or blood products before 1990 Receipt of blood-derived coagulation products before 1985
HIV	 Consider high-risk if source: Practices high-risk sexual behaviour (i.e. men who have sex with men, sexual partner who is an IDU, multiple sexual partners) Has a history of injection drug use Has received a blood transfusion, blood products or organ transplant between 1978 and 1985 Is involved with a sexual partner from any of the above groups Is an infant born to a HIV infected mother

Source: Leeds Grenville and Lennox District Health Unit Retrieved from: http://www.healthunit.org/professionals/exposure_blood/Managing-Exposures-Blood-Borne-Pathogens.pdf

- 3.4 Testing employee: <u>Post-Exposure Testing and Prophylaxis for Hepatitis</u> B (Refer to Appendix 2 OHAG document ANNEX Q)
 - 3.4.1 Obtaining informed consent is a mandatory component of pre and post-testing for the exposed employee
 - 3.4.2 If the employee refuses to be tested, the source will not be tested.
 - 3.4.3 If the exposed employee has been immunized against hepatitis B and has sufficient immunity, (i.e. Anti-HBs results greater than or equal to 10 IU/ml), there is no need to screen the source or the exposed individual for HBs and anti-HBs.
 - 3.4.4 If the individual has never been immunized against hepatitis B, test both the source (after obtaining consent) and the exposed person for HBsAg and anti-HBsAg at the time of injury.
 - 3.4.5 If the exposed employee has been immunized against Hepatitis B but shows no immunity, Hepatitis B Vaccine, and Hepatitis B immune globulin (HBIG) should be given within 48 hours of exposure to the unimmunized exposed person (employee) Efficacy of HBIG decreases with time and is unknown after 7 days. Complete the rest of the hepatitis B vaccine as per usual schedule.
 - 3.4.6 If the exposed person has been immunized against HBV and his/her serologic response is unknown, test for anti-HBsAg, provide HBV vaccine booster as required. If the serologic test comes back immune, no further action is required.

HEALTH CANADA

First Nations and Inuit Health Branch-Ontario Region

- 3.5 Testing Exposed Employee: Post-Exposure Testing HCV and HIV (Refer to Appendix 2: OHAG Document ANNEX Q)
 - 3.5.1 Obtaining informed consent is a mandatory component of pre and post-testing for the exposed employee
 - 3.5.2 If the employee refuses to be tested, the source will not be tested.
 - 3.5.3 Label all requisitions NEEDLESTICK or EXPOSURE TO BLOOD/BODY FLUIDS to ensure priority testing. Any lab requisitions must indicate EXPOSED individual, and Source individual. The exposed person's name will not be documented on the requisition of the source
 - 3.5.4 If results of the Source (client's) test(s) are negative, NO further follow up is usually required
 - 3.5.5 If the Source (client) is at high clinical or epidemiological risk for HBV, HCV or HIV infection, ensure that the exposed person receives counselling about the possible risk of infection and prevention of transmission of blood-borne diseases.
 - 3.5.6 If the source is not known, the exposed employee (after his/her informed consent is obtained) should be tested for HCV and HIV at the time of the injury, at 6 weeks, 3 months, and 6 months following injury
 - 3.5.7 It is recommended that the test be repeated at one year post-injury in the case of HIV if antiretrovirals are used.
 - 3.5.8 Other references recommend testing again one year post injury for all cases of possible accidental exposure to HCV or HIV.
- 3.6 HIV Post-Exposure Chemoprophylaxis Protocol for Possible Exposure
 - 3.6.1 HIV post exposure prophylaxis medications are stored at nursing stations and health centres with treatment, in the medication room.
 - 3.6.2 Each of these facilities has a three day PEP starter kit intended for use as an initial supply of medication. The balance of the course of treatment should come via prescription by a licensed physician.
 - 3.6.3 The prescription for HIV PEP must be written by the physician and filled as soon as possible after the HCP starts the HIV PEP starter kit stocked at the health facility.
 - 3.6.4 For additional information regarding HIV post-exposure prophylaxis refer to Appendix 3: Table 1: Recommended HIV post-exposure prophylaxis (PEP) for percutaneous injuries and Table 2: Recommended HIV post-exposure prophylaxis (PEP) for mucous membrane exposures and non-intact skin exposures.

3.7 Reporting:

- 3.7.1 The employee must report the incident/injury/exposure to their manager or designate who will facilitate the affected employee to be immediately assessed at the local medical care facility (medical clinic, hospital emergency). If the injury occurs in a remote or isolated community, the employee will contact the community physician for assessment to determine if post-exposure prophylaxis or immunization is required. In the event that the community physician is not available, the employee may contact the Regional Community Medicine Specialist. It may be necessary for the worker to obtain further assessment outside of the community.
- 3.7.2 The manager must emphasize to the staff member the importance of follow-up, if indicated, as infection with HBV, HCV or HIV may be asymptomatic. The employee should be advised of the support available to them through the Employee Assistance Program (EAP).
- 3.7.3 The manager will implement the following reporting process (Refer to http://www.esdc.gc.ca/en/reports/health_safety/hazardous_occurrence.page)
 - 3.7.3.1 Minor Injury/Incident/Exposure with no medical follow-up: Following a minor injury/incident/exposure that requires first-aid treatment only i.e. no professional medical attention sought and no time lost, the manager will complete a Hazardous Occurrence Investigation Report (HOIR) electronically using the Accident Incident Reporting System (AIRS) database within 14 days of the incident. It will automatically be submitted to Human Resources and Skills Development Canada (HRSDC). A copy is to be given to the employee.
 - 3.7.3.2 Minor Injury/Incident/Exposure with medical follow-up: If an injury/exposure/incident requires professional medical treatment resulting in no time lost i.e. does not prevent an employee from reporting for work or from effectively performing all the duties connected with their regular work, the manager will complete:
 - 3.7.3.2.1 A HOIR electronically using the Accident Incident Reporting System (AIRS) database within 14 days of the incident
 - 3.7.3.2.2 The relevant provincial Workplace Safety Insurance Board (WSIB)

 Claim Form 7 available at

 http://www.wsib.on.ca/cs/groups/public/documents/staticfile/c2li/mde-y/~edisp/wsib012386.pdf and fax it within 3 days to the HRSDC –

 Injury Compensation Program at (819) 934-6590 and also fax one copy to the Corporate Occupational Health and Safety Unit, at 613-960-1528. Please note: Forms are not to be sent directly to WSIB. A copy of the form is to be given to the employee.
 - Once the provincial Workplace Safety Insurance Board (WSIB) receives the Form 7 from HRSDC, they may contact the employee directly for more information and request the employee to complete a Workplace Safety and Insurance Board (WSIB) Worker's Report of Injury/Disease (Form 6) available at

First Nations and Inuit Health Branch-Ontario Region

- http://www.wsib.on.ca/cs/groups/public/documents/staticfile/c2li/mdex/~edisp/wsib011595.pdf.
- O NOTE: If a Form 7 was submitted, the employee has an option of voluntarily completing a Workplace Safety and Insurance Board (WSIB) Worker's Report of Injury/Disease (Form 6). The employee should contact WSIB as soon as possible for detailed instructions for submission. The employee will provide a copy of the completed form 6 to the employer/HR.
- 3.7.3.2.3 **Disabling Injury:** If an injury/incident/exposure requires medical attention, resulting in lost time (day of injury is not counted as day/time lost, even if the employee left work early) i.e. prevents an employee from reporting for work or from effectively performing all the duties connected with their regular work, the manager will complete a HOIR electronically using the Accident Incident Reporting System (AIRS) database within 14 days of the incident. The manager must also complete the relevant provincial Workplace Safety Insurance Board (WSIB) Claim – Form 7 available at http://www.wsib.on.ca/cs/groups/public/documents/staticfile/c2li/mde y/~edisp/wsib012386.pdf and fax it within 3 days to the HRSDC – Injury Compensation Program at (819) 934-6590 and also fax one copy to the Corporate Occupational Health and Safety Unit, at 613-960-1528. This must include the prior 4 weeks of earnings. Please note: Forms are not to be sent directly to the WSIB. A copy of the form 7 is to be given to the employee.
 - Once the employee returns to work, a WSIB Form 9 must be sent to HRSDC.
- 3.7.3.2.4 The employee can voluntarily report an incident to WSIB through the "Program for Exposure Incident Reporting" (PEIR). In this voluntary program, an exposure incident is defined as "an unplanned exposure to a chemical, physical or biological hazard resulting from a leak, spill, escape, explosion or direct physical contact". The purpose of the program is to collect information while it is readily available, in the event an illness occurs in the future. The employer can also report non-significant exposures to this program, but should discuss this first with the appropriate federal Labour Program regional injury compensation office.

NOTE: For assistance in completing reporting forms contact HRSDC – Injury Compensation Program.

3.7.4 All reports of the injury/incident/exposure are to be kept by the employer for a period of 10 years.

4 APPENDICES

Appendix 1: Health Canada Occupational Health Assessment Guide (OHAG) Annex O: Recommended Immunizations and Screening Tests Related to Occupational Exposure (July 2012)

Appendix 2: Health Canada Occupational Health Assessment Guide (OHAG) Annex Q: Protocol to Manage Federal Public Servants Accidentally Exposed to Blood Borne Pathogens (e.g. HBV, HCV, HIV) In the Course of Their Work (June 2010)

Appendix 3: Table 1: Recommended HIV post-exposure prophylaxis (PEP) for percutaneous injuries and Table 2: Recommended HIV post-exposure prophylaxis (PEP) for mucous membrane exposures and non-intact skin exposures. Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5409a1.htm

5 REFERENCES

BC Centre for Disease Control. (2016). Blood and Body Fluid Exposure Management Tool. Retrived from: http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/

Chapter%201%20-%20CDC/CPS CDManual BBF Tool.pdf

Centers for Disease Control and Prevention. (2009). Breastfeeding: Hepatitis B and C Infections. Retrieved from: http://www.cdc.gov/breastfeeding/disease/hepatitis.htm

Centers for Disease Control and Prevention. (2003). Exposure to Blood: What Healthcare Personnel Need to Know. Retrieved from: http://www.cdc.gov/HAI/pdfs/bbp/Exp to Blood.pdf

Centers for Disease Control and Prevention. (2005). Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Postexposure Prophylaxis: Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5409a1.htm

Centers for Disease Control and Prevention. (2013). CDC Guidance for Evaluating Health-Care Personnel for Hepatitis B Virus Protection and for Administering Postexposure Management. Retrieved from http://www.cdc.gov/mmwr/pdf/rr/rr6210.pdf

Friedman, C., Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Barlett Publishers.

Health Canada. (2012). Occupational Health Assessment Guide. Retrieved from: <a href="http://publiservice.gc.ca/services/rapb-dgrp/psohp-pstfp/assets/pdf/ohag-gest/oh

Leeds, Grenville and Lennox District Health Unit http://www.healthunit.org/professionals/exposure_blood/Managing-Exposures-Blood-Borne-Pathogens.pdf

Manitoba Health. (2009). Communicable Disease Control Integrated Post-exposure Protocol for HIV, HBV, and HCV: *Guidelines for Managing Exposures to Blood and Body Fluids*. Retrieved from: www.gov.mb.ca/health/publichealth/cdc/protocol/hiv_postexp.pdf

Ontario Hospital Association. (2012). Ontario Medical Association Communicable Diseases Surveillance Protocols: Blood Borne Diseases. Retrieved from:

 $\frac{http://www.oha.com/Services/HealthSafety/Documents/Blood\%20Borne\%20Diseases\%20Protocol\%20-w20Reviewed\%20and\%20Revised\%20March\%202015.pdf$

Public Health Agency of Canada. (2013). Canadian Immunization Guide: Hepatitis B Vaccine. Retrieved from: http://www.phac-aspc.gc.ca/publicat/cig-gci/p04-hepb-eng.php

Public Health Ontario. (2012). Best Practice Manual: Routine Practices and Additional Precautions in all Health Care Settings. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP All HealthCare Settings Eng2012.pdf

Service Ontario. (2006). Mandatory Blood Testing Act. Retrieved from: http://www.e-laws.gov.on.ca/html/regs/english/elaws regs 070449 e.htm

Revised:

Section 1: **Healthy Workplace** Policy number: **1.4**

Subject: Management of Occupational Issued: September 2015

Accidental Exposure to Infectious

Distribution: All FNIHB Staff

1 PURPOSE

Diseases

1.1 The purpose of this policy is to protect the personal health and well-being of employees; to prevent the inadvertent transmission of infectious diseases while providing care to clients; and to ensure workplace safety in compliance with the Ontario Occupational Health and Safety Act and Canada Labour Code.

2 POLICY

- 2.1 Prevention of transmission of infection and the accidental exposure to infectious diseases in a health care facility or home setting is an important component of client care. The most important airborne transmitted infections are tuberculosis, measles, and varicella. Droplet-spread diseases that may be encountered in health facilities may include pertussis, mumps, rubella, influenza, meningitis, and other acute respiratory infections (ARIs). Common diseases transmitted by contact include conjunctivitis, impetigo, scabies, norovirus and MRSA.
- 2.2 HCP adherence to immunization requirements and recommendations are the most effective methods of controlling vaccine preventable diseases (Refer to Policy 1.1 Staff Immunization). Where HCPs are not immunized, post exposure prophylaxis may be required, which may include treatment or immunization for: rabies, varicella/zoster, HIV, influenza (outbreaks), diphtheria, hepatitis A, hepatitis B, meningococcal disease, pertussis or scabies.
- 2.3 HCPs must practice hand hygiene, respiratory hygiene and cough etiquette as part of Routine Practices in all health care settings.
- 2.4 HCPs have a responsibility to their clients and colleagues to not report to work when ill with symptoms that are likely attributable to an infectious disease. HCPs must report any acute infectious disease and/or possible accidental exposure to an infectious disease as it could impact their work activities within the community. HCPs must comply with any such recommendations regarding work restrictions and/or modifications that may result.

3 PROCEDURE

For Occupational Exposures to Blood and Body Fluids refer to Policy 1.3

3.1 Prevention

3.1.1 All FNIHB - OR HCPs are expected to meet current immunization recommendations and to maintain up-to-date immunization status as outlined in Policy 1.1 Staff Immunization.

- 3.1.2 All FNIHB OR HCPs should not report to work if they are ill and experiencing any of the following (but not limited to) symptoms:
 - 3.1.2.1 A fever
 - 3.1.2.2 An undiagnosed rash
 - 3.1.2.3 Flu-like symptoms
 - 3.1.2.4 Diarrhea and/or vomiting
 - 3.1.2.5 Eye infection
 - 3.1.2.6 Other infectious illness as recommended by a physician
- 3.1.3 All FNIHB OR HCPs must consistently use Routine Practices, including hand hygiene, application of PPE based on a risk assessment (which may include applying mask, eye protection, gown, gloves) and adhere to Additional Practices when indicated. (Refer to Section 3.0: Routine Practices and Section 4.0: Additional Precautions)
- 3.1.4 Staff must practice Respiratory Hygiene and Cough Etiquette which refers to measures designed to minimize the transmission of respiratory pathogens via the droplet route in all health care settings using source containment beginning at the point of initial client encounter. (Refer to Policy 3.2 Risk Assessments Including Acute Respiratory Infection).
- 3.2 Asymptomatic HCPs as Carriers of Blood-Borne Pathogens (as per OMA/OHA Communicable Disease Surveillance Protocol)
 - 3.2.1 Most HCPs carrying HBV, HCV or HIV can work safely with clients without risk of transmission of the virus, as long as reasonable precautions are taken and Routine Practices are observed at all times. Therefore, routine screening of staff is not required after screening at employment.
 - 3.2.2 Asymptomatic infected HCPs who perform "exposure–prone" procedures (e.g. repair of major traumatic injuries) have an ethical obligation to know their serology status for HBV, HCV and HIV and to seek guidance from their professional regulatory body, or for those with no regulatory body, the Regional Community Medicine Specialist with respect to the potential for transmission of infection to their clients.

NOTE: Some professional colleges have specific policies with regard to blood-borne pathogen infected health care professionals licensed by the college; health care professionals must be aware of and follow the requirements of their college.

3.3 Risk Assessment of Disease/Exposure Incident:

- 3.3.1 The HCP must report the exposure/disease incurred to their manager or designate who will facilitate the affected staff member to be immediately assessed at the local medical care facility (medical clinic, hospital emergency). If the exposure occurs in a remote or isolated community, the employee will contact the community physician for assessment. In the event that the community physician is not available, the employee may contact the Regional Community Medicine Specialist. It may be necessary for the worker to obtain further assessment outside of the community. The employee should be advised of the support available to them through the Employee Assistance Program (EAP).
- 3.3.2 If the exposure was to a disease that is vaccine preventable, and their immune status is not known, serology should be completed to verify immunity to diseases such as: measles, mumps, rubella, varicella, pertussis, hepatitis A or B.
- 3.3.3 If staff is susceptible, the staff may require **post exposure prophylaxis OR immunization** which in some situations may prevent them from acquiring the disease;
 e.g. measles, mumps, rubella, varicella/zoster, diphtheria, pertussis, hepatitis B, meningitis, rabies, influenza, diphtheria, meningococcal disease, pertussis.
- 3.3.4 If the results of the investigation determine a staff member had a significant exposure, and is found to be susceptible to the infectious disease, or becomes sick with the illness, they may need to be excluded from work during the period of time when they may be at risk of transmitting the disease. Refer to the OHA/OMA communicable disease surveillance protocols for periods of communicability, and periods of time when staff should be furloughed. Also refer to NACI Canadian Immunization Guide current edition, and the PHAC Routine Practices and Additional Precautions (2013), Table 10 Transmission Characteristics and Precautions by Specific Etiology.
- 3.3.5 The risk assessment/evaluation should include the circumstances around the actual or potential exposure, which may include, but is not limited to proximity of staff to ill client, length of exposure, medical device that led to exposure, and the type of Personal Protective Equipment (PPE) being worn at the time of the potential exposure and/or if the employee is exhibiting any signs or symptoms of an infectious disease.
- 3.3.6 Following a report from the medical assessment, the appropriate manager, will facilitate any need for work restrictions during incubation or active disease. Human Resources Department should be included in these discussions.

3.4 Reporting:

3.4.1 The employee must report the incident/injury/exposure to their manager or designate who will facilitate the affected employee to be immediately assessed at the local medical care facility (medical clinic, hospital emergency). If the injury or exposure occurs in a remote or isolated community, the employee will contact the community physician for assessment to determine if immunity screening, post-exposure prophylaxis or immunization is required. In the event that the community physician is not available, the employee may contact the Regional Community Medicine Officer. It may be necessary for the worker to obtain further assessment outside of the community.

- 3.4.2 The employee should be advised of the support available to them through the Employee Assistance Program (EAP).
- 3.4.3 Process for Reporting Injuries/Incidents/Exposures: (Refer to http://www.esdc.gc.ca/en/reports/health-safety/hazardous-occurrence.page
- 3.4.4 Minor Injury/Incident/Exposure with no medical follow-up: Following a minor injury/incident/exposure that requires first-aid treatment only i.e. no professional medical attention sought and no time lost, the manager will complete a Hazardous Occurrence Investigation Report (HOIR) electronically using the Accident Incident Reporting System (AIRS) database within 14 days of the incident. It will automatically be submitted to Human Resources and Skills Development Canada (HRSDC). A copy is to be given to the employee.
- 3.4.5 Minor Injury/Incident/Exposure with medical follow-up: If an injury/exposure/incident requires professional medical treatment resulting in no time lost i.e. does not prevent an employee from reporting for work or from effectively performing all the duties connected with their regular work, the manager will complete a HOIR electronically using the Accident Incident Reporting System (AIRS) database within 14 days of the incident. The manager must complete the relevant provincial Workplace Safety Insurance Board (WSIB) Claim Form 7. (available at http://www.wsib.on.ca/wsib/wsibsite.nsf/public/home_e) and fax it within 3 days to the HRSDC Injury Compensation Program at (819) 934-6590 and also fax one copy to the Corporate Occupational Health and Safety Unit, at 613-960-1528. Please note: Forms are not to be sent directly to the WSIB. A copy of the form 7 is to be given to the employee.
 - 3.4.5.1 Once the provincial Workplace Safety Insurance Board (WSIB) receives the Form 7, they may contact the employee directly for more information and request the employee to complete a Workplace Safety and Insurance Board (WSIB) Worker's Report of Injury/Disease (Form 6) available athttp://www.wsib.on.ca/cs/groups/public/documents/staticfile/c2li/mdey/~edis p/wsib012386.pdf.

NOTE: If a Form 7 was submitted, the employee has an option of voluntarily completing a Workplace Safety and Insurance Board (WSIB) Worker's Report of Injury/Disease (Form 6) available athttp://www.wsib.on.ca/cs/groups/public/documents/staticfile/c2li/mdex/~edisp/wsib011595.pdf. The employee should contact WSIB as soon as possible for detailed instructions for submission. The employee will give a copy of the completed form 6 to the employer /HR.

3.4.6 Disabling Injury / occupationally acquired illness: If an injury/incident/exposure requires medical attention and results in lost time (day of injury is not counted as day/time lost, even if the employee left work early) i.e. injury, incident, exposure or furlough prevents an employee from reporting for work or from effectively performing all the duties connected with their regular work, the manager will complete a HOIR electronically using the Accident Incident Reporting System (AIRS) database within 14 days of the incident. The manager must also:

- 3.4.6.1 Complete the relevant provincial Workplace Safety Insurance Board (WSIB) Claim Form 7 available at http://www.wsib.on.ca/cs/groups/public/documents/staticfile/c2li/mdey/~edisp/wsib012386.pdf
- 3.4.6.2 Fax it **within 3 days** to the HRSDC Injury Compensation Program at 819-934-6590 and also
- 3.4.6.3 Fax one copy to the Corporate Occupational Health and Safety Unit, at 613-960-1528. Note: Forms are **not** to be sent directly to the WSIB. A copy of the form 7 is to be given to the employee.
- 3.4.6.4 Once the employee returns to work, a WSIB Form 9 must be sent to HRSDC.
- 3.4.7 The employee can voluntarily report an incident to WSIB through the "Program for Exposure Incident Reporting" (PEIR). In this voluntary program, an exposure incident is defined as "an unplanned exposure to a chemical, physical or biological hazard resulting from a leak, spill, escape, explosion or direct physical contact". The purpose of the program is to collect information while it is readily available, in the event an illness occurs in the future. The employer can also report non-significant exposures to this program, but should discuss this first with the appropriate federal Labour Program regional injury compensation office.
- 3.4.8 For assistance in completing reporting forms contact HRSDC Injury Compensation Program.
- 3.4.9 All reports of the injury/incident/exposure are to be kept by the employer for a period of 10 years. Where there has been an exposure to designated substances (e.g. asbestos), the report must be kept indefinitely, or for 40 years.

4 REFERENCES

Canada Occupational Health and Safety Regulations, Part 15 Hazardous Occurrence Investigation Recording and Reporting. Retrieved from: http://laws-lois.justice.gc.ca/eng/regulations/sor-86-304/

Canadian Paediatric Society. (2008). Position Statement on Infection Control in Paediatric Office Settings: *Paediatric Child Health*. 13(5), 408-419.

Friedman, C., Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Barlett Publishers

Health Canada. (2012). Occupational Health Assessment Guide. Retrieved from: http://publiservice.gc.ca/services/rapb-dgrp/psohp-pstfp/assets/pdf/ohag-gest/ohag-gest_e.pdf

Health Canada. (2002). Prevention and Control of Occupational Infections in Health Care. An Infection Control Guideline. CCDR 2002; 28S1:1-264

Ontario Hospital Association. (2014). Communicable Disease Surveillance Protocols. Retrieved from:http://www.oha.com/Services/HealthSafety/Pages/CommunicableDiseasesSurveillanceProtocols.aspx

PHAC. (2013). Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care. Table 10.

Workplace Safety & Insurance Board. (2012). Construction Exposure Incident Reporting. http://www.wsib.on.ca

Government of Ontario. (1990). Occupational Health Safety Act: Designated Substance. Retrieved from http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_090490_e.htm#BK35

SECTION 2: HAND HYGIENE

Section 2: **Hand Hygiene** Policy number: **2.1**

Subject: Hand Hygiene Issued: September 2015

Distribution: All FNIHB Staff Revised:

1 POLICY

- 1.1 Hand hygiene is the single most effective infection prevention and control measure to prevent the transmission and spread of microorganisms leading to infections.
- 1.2 Hand hygiene is the responsibility of the organization and all individuals involved in health care. All health care providers and support staff must comply with best practices for hand hygiene in accordance with the current *PIDAC Best Practices for Hand Hygiene in All Health Care Settings* document.

2 PROCEDURE

- 2.1 There are two methods of performing hand hygiene: (Refer to Appendix 4: Fact Sheet Hand Hygiene for Health Care Settings)
 - 2.1.1 Alcohol-Based Hand Rub (ABHR)
 - 2.1.2 Hand Washing
- 2.2 <u>Alcohol Hand Based Rub (ABHR) is the preferred method</u> for decontaminating hands. ABHR is faster and more effective than washing hands when hands are **not visibly soiled** and is less irritating than washing hands.

NOTE: Non-alcohol-based waterless antiseptic agents are not recommended for hand hygiene in health care settings and should not be used.

- 2.2.1 ABHRs provide for a rapid kill of most transient microorganisms
 - 2.2.1.1 ABHR is available in concentrations from 60 to 90%; however a 70 to 90% concentration is to be used in all FNIHB health care settings
 - 2.2.1.2 ABHRs are not to be used with water as water dilutes alcohol and decreases effectiveness
 - 2.2.1.3 ABHRs contain emollients to reduce hand irritation
 - 2.2.1.4 ABHRs are less time-consuming than washing with soap and water
 - 2.2.1.5 ABHR should not be used immediately after hand washing with soap and water as it results in an increased risk of irritation of the hands (Refer to Policy 4.2 Hand Protection Program)

- 2.2.1.6 ABHRs must have a Drug Identification Number (DIN) or a Natural Product Number (NPN) from Health Canada
- 2.2.1.7 ABHR must be available at point-of-care, (i.e. the place where three elements occur together: the client, the health care provider, and care or treatment involving client) and entrances to each health care setting. They should not be placed adjacent to hand washing sinks, nor installed over ignition sources or carpet. (Refer to Policy 4.3 Placement of Hand Hygiene Products for further information)
- 2.3 Hand washing with soap and water must be performed when hands are visibly soiled.
 - 2.3.1 Antimicrobial soap is not required and is not recommended in areas outside of critical care
 - 2.3.2 Bar soaps are not acceptable in health care settings as they harbour bacteria that may be spread to subsequent users.
- 2.4 Indications for Hand Hygiene:
 - 2.4.1 A hand hygiene indication points to the reason hand hygiene is necessary at a given moment. There are four basic indications for performing hand hygiene. These are referred to as "Your 4 Moments For Hand Hygiene." (Refer to Appendix 5)
 - 2.4.1.1 BEFORE initial client/client environment contact
 - 2.4.1.2 BEFORE aseptic procedure
 - 2.4.1.3 AFTER body fluid exposure risk
 - 2.4.1.4 AFTER client/client environment contact
- 2.5 Common Indications for Hand Hygiene Based on the 4 Moments:
 - 2.5.1 When hands are visibly soiled
 - 2.5.2 Before putting on and after removing gloves. Gloves are not a substitute for hand hygiene
 - 2.5.3 After removing other personal protective equipment
 - 2.5.4 Before and after using the toilet
 - 2.5.5 After performing personal functions such as sneezing, coughing or using a tissue to wipe the nose
 - 2.5.6 Before and after preparing, handling, serving or eating food
 - 2.5.7 When hands accidentally come into contact with secretions, excretions, blood and body fluids (hands must be washed with soap and running water)
 - 2.5.8 Whenever there is a doubt about the necessity of performing hand hygiene

2.6 Factors Influencing Hand Hygiene:

- 2.6.1 **Condition of the skin**: Intact skin vs. presence of dermatitis, cracks, cuts or abrasions is the body's first line of defence against bacteria. ABHRs are less irritating to skin than soap and water.
- 2.6.2 **Nails:** Keep natural nails clean and short. The nail should not show past the end of the finger. Long nails are difficult to clean, can pierce gloves and harbour more microorganisms than short nails.
- 2.6.3 **Artificial nails or nail enhancements** (such as gel nails and nail wraps i.e., adhesive decorative plastic or vinyl attached to nails): Are not to be worn by those giving care or preparing food as they have been implicated in the transfer of microorganisms
- 2.6.4 **Nail polish:** Only nail polish that is fresh and free of cracks or chips is acceptable.
- 2.6.5 **Products:** Products must be dispensed in a disposable pump container that is not toppedup, to prevent contamination. Wall mounted dispensers must be filled with disposable soap, hand cream, or ABHR refill bags.

2.6.6 **Jewellery**:

- 2.6.6.1 Hand and arm jewellery hinder hand hygiene
- 2.6.6.2 Arm jewellery, including watches, should be removed or pushed up above the wrist before performing hand hygiene. After performing hand hygiene, a watch, if worn, should not be manipulated or touched.
- 2.6.6.3 Rings increase the number of microorganisms present on hands, are a barrier to completely cleaning all surfaces of the hands, and increase the risk of tears in gloves
- 2.7 Techniques For Performing Hand Hygiene:
 - 2.7.1 <u>Technique for Using ABHR</u>: (Refer to Appendix 6: How to Handrub)
 - 2.7.1.1 Ensure hands are visibly clean (if soiled, follow hand washing steps) and dry.
 - 2.7.1.2 Apply 1 to 2 full pumps of product onto one palm; the volume should be such that 15 seconds of rubbing is required for drying.
 - 2.7.1.3 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.
 - 2.7.1.4 Continue rubbing hands until product is dry. This will take a minimum of 15 seconds if sufficient product is used.

NOTE: Hands must be fully dry before touching the client or the care environment for the ABHR to be effective and to eliminate the extremely rare risk of flammability in the presence of an oxygen-enriched environment.

2.7.2 **Technique for Hand Washing**: (Refer to Appendix 7: How to Handwash)

- 2.7.2.1 Wet hands with warm (not hot or cold) water; hot or cold water is hard on the hands, and will lead to dryness.
- 2.7.2.2 Apply liquid or foam soap.
- 2.7.2.3 Vigorously lather all surfaces of hands for a minimum of 15 seconds. Removal of transient or acquired bacteria requires a minimum of 15 seconds of 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.
- 2.7.2.4 Using a rubbing motion, thoroughly rinse soap from hands; residual soap can lead to dryness and cracking of skin.
- 2.7.2.5 Dry hands thoroughly by blotting hands gently with a paper towel; rubbing vigorously with paper towels can damage skin.
- 2.7.2.6 Turn off taps with paper towel, to avoid recontamination of the hands.
- 2.7.2.7 DO NOT use ABHR immediately after washing hands, as skin irritation will be increased

NOTE: If visible soil is present and running water is not immediately available (e.g. prehospital care, home care), use moistened towelettes to remove the visible soil, followed by ABHR.

2.8 Hand Hygiene Compliance:

- 2.8.1 Ongoing monitoring and observation of hand hygiene practices must be carried out in each health care facility on an annual basis to ensure that all health care providers and support staff are meeting best practices.
- 2.8.2 Supervisors must ensure staff have an annual review of the FNIHB policies and procedures on hand hygiene as well as an assessment of the staff member's hands (Refer to Policy 2.2: Hand Care Protection Program).
- 2.8.3 Following the policy review, the supervisor or delegated staff member will observe staff performing hand hygiene and provide feedback on technique.
- 2.8.4 All staff will annually complete a self-assessment of their hand hygiene knowledge and practice. (Refer to Appendix 8: Hand Hygiene Self Assessment Tool).

3 APPENDICES

Appendix 4: Public Health Ontario. PIDAC Hand Hygiene Fact Sheet http://www.publichealthontario.ca/en/eRepository/PIDAC Hand Hygiene Fact Sheet 2013.pdf

Appendix 5: Public Health Ontario. 4 Moments of Hand Hygiene. http://www.publichealthontario.ca/en/eRepository/4-moments-for-hand-hygiene-poster.pdf

Appendix 6: Public Health Ontario: How to Hand Rub. http://www.publichealthontario.ca/en/eRepository/how-to-handrub.pdf

Appendix 7: Public Health Ontario. How to Hand Wash. http://www.publichealthontario.ca/en/eRepository/how-to-handwash.pdf

Appendix 8: Health Canada Hand Hygiene Self Assessment Tool

4 REFERENCES

Public Health Ontario. (2014). Best Practices for Hand Hygiene in all Health Care Settings, 4th edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/2010-12%20BP%20Hand%20Hygiene.pdf

Public Health Ontario. (2011). Just Clean Your Hands. Retrieved from http://www.publichealthontario.ca/en/BrowseByTopic/InfectiousDiseases/JustCleanYourHands/Pages/Just-Clean-Your-Hands.aspx

Public Health Ontario. (2012). Hand Hygiene Fact Sheet for Health Care Settings. Retrieved from: http://www.publichealthontario.ca/en/eRepository/PIDAC_Hand_Hygiene_Fact_Sheet_2013.pdf

Section 2: **Hand Hygiene** Policy number: **2.2**

Subject: Hand Care Protection Program Issued: September 2015

Distribution: All FNIHB Staff Revised:

1 PURPOSE

- 1.1 A proactive hand care protection program for staff is a key component of improving effective and safe hand hygiene practices to protect the staff member and the client from infections.
- 1.2 Skin conditions, such as hand eczema or psoriasis in health care providers, can lead to decreased work productivity, increased sick leave and increases in health care costs.
- 1.3 Improved adherence to hand hygiene has been shown to terminate outbreaks, reduce the transmission of antimicrobial-resistant organisms and reduce overall infection rates.
- 1.4 Frequent and repeated use of hand hygiene products, particularly soaps and other detergents, is a primary cause of chronic irritant contact dermatitis among health care workers.

2 POLICY

- 2.1 The organization will ensure an assessment of the staff member's hands using the Assessment Tool for Health Care Provider Hands.
- 2.2 Staff should strive to maintain hand skin integrity to enable effective hand hygiene.

3 PROCEDURE

- 3.1 At the time of IPAC orientation for new hires, the hiring manager/coordinator will perform an assessment of the staff member's hands using the Assessment Tool for Health Care Provider Hands. (Refer to Appendix 9: Assessment Tool for Health Care Provider Hands)
- 3.2 For current staff, the process should take place at the time of the annual review of hand hygiene practices. (Refer to Policy 2.1: Hand Hygiene)
- 3.3 As part of the assessment, verify that the staff member is using correct hand hygiene technique and is aware of how to protect skin integrity. (Refer to Appendix 4: Hand Hygiene Fact Sheet)
- 3.4 Educate staff regarding wearing protective gloves correctly to decrease irritation from the gloves.
- 3.5 At the first sign of any irritation, the staff should be encouraged to report to their manager, and have their hands assessed.
- 3.6 Encourage staff to practice good hand care while outside of the work place as hand protection care is a 24 hour/7 day commitment. Some practices include:

- 3.6.1 Protect hands from chemical and extreme weather conditions
- 3.6.2 Continue hand protection for all cooking, cleaning, bathing and child care duties
- 3.6.3 Avoid chemicals on skin that may cause reactions e.g. nickel found in jewellery
- 3.6.4 Use protective gloves when indicated and use moisturizers frequently

3.7 Product Selection:

- 3.7.1 Provide a 70-90% alcohol-based hand rub (ABHR) at point of care as one of the primary products to be used for hands that are not visibly soiled. Where a staff has sensitivity to a product, every effort will be made to find an alternate product or formulation.
- 3.7.2 Educate staff on the benefits of using ABHR over washing with soap and water as well as appropriate hand hygiene techniques to minimize damage to hands. ABHR is more effective and better tolerated than soap and water. ABHR significantly reduce the number of microorganisms on skin, are fast acting and cause less skin irritation. Select alcoholbased hand rub with emollients.
- 3.7.3 Staff will be provided with hand moisturizing skin-care products and instructions on their use in efforts to minimize the occurrence of irritant contact dermatitis associated with hand hygiene.
- 3.7.4 Hand hygiene products chosen for use by staff must not interfere with glove integrity or other hand hygiene products.
- 3.7.5 Moisturizing products are to be provided by the facility and not brought from home. (Products from home may not be dispensed safely, compatible with gloves or hand hygiene products.)
- 3.7.6 Where possible, staff should be encouraged to provide input into product selection to maximize acceptance of products. This may not be feasible in all health facilities.
- 3.7.7 When selecting non-antimicrobial soaps, antimicrobial soaps or alcohol-based hand rubs, solicit information from manufacturers regarding any known interactions between products used to clean hands, skin care products, and the types of gloves used in the facility.
- 3.7.8 All hand hygiene products should be purchased and dispensed in disposable closed system containers, which are tamper proof and do not allow for refilling or back-flow. The practice of "topping up" dispensers can lead to bacterial contamination of soap.
- 3.7.9 Select paper towels that are non-irritating.
- 3.7.10 Select gloves that are non-irritating without powder. To reduce skin irritation from gloves:
 - 3.7.10.1 Protective gloves should be used when necessary, but for as short a time as possible

- 3.7.10.2 Keep gloves touch specific (e.g. change them after each task)
- 3.7.10.3 Protective gloves should be intact and clean and dry inside
- 3.7.10.4 Hands must be clean and dry when donning gloves

4 APPENDICES

Appendix 4: Public Health Ontario. PIDAC Hand Hygiene Fact Sheet http://www.publichealthontario.ca/en/eRepository/PIDAC Hand Hygiene Fact Sheet 2013.pdf

Appendix 9: Public Health Ontario. Just Clean Your Hands Program. Assessment Tool for Health Care Provider Hands Just Clean Your Hands Program. http://www.publichealthontario.ca/en/BrowseByTopic/InfectiousDiseases/JustCleanYourHands/Pages/Just-Clean-Your-Hands.aspx

5 REFERENCES

Public Health Ontario. (2014). Best Practices for Hand Hygiene in all Health Care Settings, 4th edition. Retrieved from: http://www.publichealthontario.ca/en/eRepository/2010-12%20BP%20Hand%20Hygiene.pdf

Public Health Ontario. (2011). Just Clean Your Hands. Retrieved from http://www.publichealthontario.ca/en/BrowseByTopic/InfectiousDiseases/JustCleanYourHands/Pages/Just-Clean-Your-Hands.aspx

Section 2: **Hand Hygiene** Policy number: **2.3**

Subject: Placement of Hand Hygiene Issued: September 2015

Products

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 Providing alcohol based hand rub (ABHR) at point of care makes it easier for staff to clean their hands the right way at the right time. Sinks are not always convenient and often not located close to where care is provided. Product placement has been shown to improve hand hygiene compliance by providing hand cleaning products where staff can clean their hands without leaving the client (at point-of-care).

2 POLICY

- 2.1 Hand hygiene is to be performed according to the four moments of hand hygiene by all employees, and is the responsibility of all individuals involved in healthcare.
- 2.2 FNIHB requires that the multidisciplinary, multifaceted hand hygiene program in place includes hand hygiene products are available at point-of-care to where client contact is taking place, and are easily accessible for use by staff and clients. Wherever possible, the products should be placed according to best practices.

3 PROCEDURE

3.1 Assessment

- 3.1.1 There are two ways to perform hand hygiene, with ABHR or with soap and water. However, when hands are visibly soiled, soap and water is the preferred method.
- 3.1.2 Where possible form a point of care assessment team which includes representation from various disciplines including front-line health care providers, environmental cleaners and an occupational health and safety representative. Consider the common workflow in the client environment, and provide input on the most convenient location for hand hygiene products. Sinks will determine the placement for soap dispensers.
- 3.1.3 Hand hygiene products must be available at point-of-care in all health care settings for use by staff and clients.
- 3.1.4 Conduct a local risk assessment related to placement of ABHR dispensers in client care areas. Care should be taken to avoid direct access to ABHR for clients who may not realize the negative effects of ingestion or misuse of any kind. Consider:

- 3.1.4.1 Patient population
- 3.1.4.2 Dispensers protruding in a way that could cause injuries
- 3.1.4.3 Product leaking on surfaces causing falls or other injuries
- 3.1.5 A testing phase should be considered to verify that placement is correct. Provide a temporary means of securing the dispensers for the trial period to test the positioning to verify it is in the correct place. Secure the dispensers once the front-line staff confirms that the placement is correct for workflow patterns.
- 3.1.6 Identify the best location for hand lotion dispensers. They should be placed so that they are easily accessible to encourage frequent use.

3.2 Hand Washing Sinks

- 3.2.1 Hand washing sinks should be free standing and optimally should be different than the sinks used by clients.
- 3.2.2 Hand washing sinks should be used only for hand washing.
- 3.2.3 Only single use paper towels should be used and placed with unobstructed access to limit splashing or dripping. Do not use cloth drying towels. Do not use hot air dryers in clinical areas.
- 3.2.4 Foot pedal operated waste bins should be placed near the door, so after the paper towel is used to dry one's hands, to turn off the tap, and to open the door, before being discarded.
- 3.2.5 A moistened hand/skin towelette followed by ABHR may be used when visible soiling of hands occurs in areas where hand washing sinks are not readily available.
- 3.2.6 To decrease the risk of contamination of hand-washing products, all hand hygiene products should be purchased and dispensed in disposable closed system containers, which are tamper proof and do not allow for refilling or back-flow. "Topping up" is not permitted.
- 3.3 Alcohol based hand rub (ABHR)
 - 3.3.1 Only non-refillable bottles of ABHR must be used.
 - 3.3.2 The following factors should be taken into consideration when placing ABHR:
 - 3.3.2.1 Place at point-of-care
 - 3.3.2.2 Place at entrance to each health care area
 - 3.3.2.3 Do not place adjacent to hand washing sinks
 - 3.3.2.4 Do not install over ignition source, light switches, electrical outlets, or carpet

3.3.3 Verify local fire regulations regarding placement of ABHR. Consultation with the Fire Marshall or local fire department may be required regarding placement and storage decisions related to alcohol-based hand rub.

3.4 General Considerations

- 3.4.1 Verify placement recommendations of all hand care products (ABHR, lotions and soaps) (Refer to Appendix 10: Placement of Dispensers Checklist) will meet the Occupational Health and Safety recommendations such as:
 - 3.4.1.1 Dispensers are easily visible
 - 3.4.1.2 Within easy reach without unobstructed access
 - 3.4.1.3 Placed at the optimal height
 - 3.4.1.4 Consider accessibility of those required to use hand hygiene products
 - 3.4.1.5 Easy to activate
 - 3.4.1.6 Clearly labeled
- 3.4.2 Identify responsibilities for:
 - 3.4.2.1 Procurement, trials, ease of use of pumps
 - 3.4.2.2 Installation of dispensers in identified places
 - 3.4.2.3 Ongoing functional maintenance of dispensers
 - 3.4.2.4 Ongoing cleaning of dispensers and replacing empty product in a timely manner.
- 3.4.3 It is critical that dispensers are maintained so that they are functional and have product in them (e.g. consider a system to indicate (flag) when the product requires replacement or a label identifying where to order more product). Ensure that housekeeping staff is informed of the current system in place to indicate action is required for them.
- 3.4.4 The Nurse-in-Charge and local Occupational Health and Safety representative should develop an ongoing verification plan that the hand hygiene system is effective and maintained for the respective health care facility. A method such as an Occupational Health and Safety Audit could be used to verify the hand hygiene system is maintained to support healthy hands while improving compliance. (Refer to Appendix 11: JCYH Placement Tool for Hand Hygiene Products).

4 APPENDICES

Appendix 10: Placement of Dispensers Checklist.

Appendix 11: Public Health Ontario. Placement Tool for Hand Hygiene Products. Just Clean Your Hands (JCYH) Program.

http://www.publichealthontario.ca/en/BrowseByTopic/InfectiousDiseases/JustCleanYourHands/Pages/Just-Clean-Your-Hands.aspx

5 REFERENCES

Public Health Ontario. (2014). Best Practices for Hand Hygiene in all Health Care Settings, 4th Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/2010-12%20BP%20Hand%20Hygiene.pdf

Public Health Ontario. (2011). Just Clean Your Hands. Retrieved from http://www.publichealthontario.ca/en/BrowseByTopic/InfectiousDiseases/JustCleanYourHands/Pages/Just-Clean-Your-Hands.aspx

CAN/CSA-B651-04. (2006). Accessible Design for the Built Environment. Canadian Standards Association.

SECTION 3: ROUTINE PRACTICES

Section 3: **Routine Practices** Policy number: **3.1**

Subject: Routine Practices Issued: September 2015

Distribution: All FNIHB Staff Revised:

1 PURPOSE

1.1 Routine Practices refer to infection prevention and control practices to be used with **all clients** during **all care**, to prevent and control transmission of microorganisms during all client interactions. Routine Practices are based on the premise that **all** clients are potentially infectious, even when asymptomatic, and that the same safe standards of practices should be used routinely with **all** clients to prevent exposure to blood, body fluids, secretions, excretions, mucous membranes, non-intact skin or soiled items and to prevent the spread of microorganisms.

2 POLICY

- 2.1 Routine Practices shall be incorporated in all health care settings and into the daily practice of all staff
- 2.2 Staff will perform a risk assessment prior to each interaction with clients, and will don Personal Protective Equipment (PPE) when it is anticipated that they may come in contact with blood, body fluids, secretions, or excretions.
- 2.3 The Routine Practices and Additional Precautions set out by PIDAC must be practiced in all settings where health care is provided, across the continuum of health care.
- 2.4 Recommendations outlined in the PHAC infection prevention and control guideline *Hand Hygiene Practices in Healthcare Settings* and specified by Accreditation Canada should be followed.

3 PROCEDURE

NOTE: For information on the Chain of Transmission please refer to the Introduction of this manual.

Refer to Appendix 12 for elements that comprise routine practices.

- 3.1 **Risk Assessment.** Before each client interaction a point of care risk assessment should be performed in order to determine the appropriate routine practices to implement for safe client care. (Refer to Policy 3.2: Risk Assessment Including Acute Respiratory Illnesses (ARI))
- 3.2 **Hand Hygiene** must be performed with an alcohol-based hand rub (ABHR) or with soap and water if hands are visibly soiled, before and after contact with a client or their environment, before invasive/aseptic procedures, after contact with body fluids and before and after using gloves. (Refer to Policy 2.1: Hand Hygiene, Policy 2.2: Hand Care Protection, 2.3: Placement of Hand Hygiene Products)

3.3 **Control of the Environment:** (Refer to Policy Section 7.0)

- 3.3.1 Cleaning of equipment that is being used by more than one client between uses will prevent transmission of germs to other staff or clients
- 3.3.2 Cleaning of the health care environment, including safe handling of soiled linen and waste (e.g. sharps) will prevent exposure and transmission to others
- 3.3.3 Engineering controls, such as well-maintained heating, ventilation and air conditioning systems will be properly maintained in accordance with CSA Standards. Reception areas may consider a glass / plexiglass barrier to minimize risk of exposure to clients with acute respiratory infection symptoms.
- 3.3.4 Sharps containers, personal protective equipment, hand hygiene product dispensers and adequate hand wash sinks will be accessible, and available at point of care.
- 3.3.5 Safety Engineered Medical Devices will be used at all times for the protection of staff and clients as required by health and safety legislation.

3.4 Administrative Controls

- 3.4.1 Policies and procedures are followed to ensure that staff are able to deal effectively with transmission risks associated with infectious illnesses.
- 3.4.2 Staff education is provided to heighten awareness of infectious diseases, their mode of transmission and prevention of transmission.
- 3.4.3 Healthy workplace policies are in place that exclude staff from working when ill with a communicable disease that would put clients and colleagues at risk.
- 3.4.4 Immunization programs are in place for staff and for clients where applicable.
- 3.4.5 Respiratory etiquette is practiced by both staff and clients.
- 3.4.6 Monitoring of compliance with feedback is built into the program to measure compliance with Routine Practices, including hand hygiene.
- 3.4.7 Sufficient staff levels enable health care providers to comply with infection prevention and control policies and procedures.
- 3.5 **Personal Protective Equipment (PPE)**: PPE and barrier equipment (e.g. gowns, gloves, masks, masks with visors, goggles, N95 respirators) will be available and easily accessible at point of care to enable the staff member to avoid unprotected contact with blood, body fluids, secretions, excretions, non-intact skin or mucous membranes (Refer to Policy 3.2: Risk Assessment Including Acute Respiratory Illnesses (ARI))

4 APPENDIX

Appendix 12: PIDAC's Routine Practices Fact Sheet for All Health Care Settings. Routine Practices and Additional Precautions in All Health Care Settings, p. 63, Nov. 2012

5 REFERENCES

Accreditation Canada. (2010). Required Organizational Practices - Infection Control.

Occupational Health and Safety Act. Ontario Regulation 474/07. Needle Safety Retrieved from: http://www.e-laws.gov.on.ca/html/regs/english/elaws regs 070474 e.htm

Public Health Agency of Canada. (2012). Hand Hygiene Practices in Health Care Settings. Retrieved from: http://publications.gc.ca/site/eng/430135/publication.html

Public Health Ontario. (2012). Routine Practices and Additional Precautions in All Health Care Settings. 3rd edition. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP_All_HealthCare_Settings_Eng2012.pdf

Public Health Ontario. (2014). Best Practices for Hand Hygiene in All Health Care Settings. 4th edition. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/2010-12%20BP%20Hand%20Hygiene.pdf

Public Health Agency of Canada (PHAC). (2013). Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care Settings. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html

Section 2: **Routine Practices** Policy number: **3.2**

Subject: Risk Assessment Including Issued: September 2015

Acute Respiratory Infection (ARI)

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

- 1.1 The key to implementing Routine Practices is the **assessment of risk** before each client interaction, taking into consideration events, circumstances and practices to determine which exposure controls are required. Based on this point-of-care risk assessment, staff must use all appropriate strategies of Routine Practices including hand hygiene, and the use of appropriate personal protective equipment (PPE) to reduce the transmission of microorganisms.
- 1.2 Infectious respiratory diseases, such as colds, influenza, and pneumonia, are a common and often major cause of illness. Implementing strategies for the assessment of acute respiratory infection (ARI) will prevent the transmission of these infectious agents within a health care setting.

2 POLICY

- 2.1 Staff must incorporate the risk assessment into daily practice. A risk assessment must be done before each interaction with a client and his/her environment in order to determine which interventions are required to prevent transmission of microorganisms.
- 2.2 Staff must maintain appropriate surveillance and infection prevention practices in order to prevent the transmission of all respiratory infections in health care settings

3 PROCEDURE

- 3.1 Basic Point-of-Care Risk Assessment:
 - 3.1.1 The risk of transmission of microorganisms between individuals involves factors related to:
 - 3.1.1.1 Client infection status (including colonization)
 - 3.1.1.2 Characteristics of the client
 - 3.1.1.3 Type of care activities to be performed
 - 3.1.1.4 Resources available for control
 - 3.1.1.5 Staff member's immune status

- 3.1.2 When making the risk assessment for a given encounter with a client, consider the risk of:
 - 3.1.2.1 Contamination of skin or clothing
 - 3.1.2.2 Exposure to blood, body fluids, secretions, and excretions
 - 3.1.2.3 Exposure to non-intact skin
 - 3.1.2.4 Exposure to mucous membranes
 - 3.1.2.5 Exposure to contaminated equipment or surfaces
 - 3.1.2.6 Recognition of symptoms of infection i.e. fever, cough, diarrhea, vomiting, rash, etc.
 - 3.1.2.7 Client soiling of the environment
- 3.1.3 In order to perform a point-of-care risk assessment, consider the questions listed in Appendix 13: Routine Practices Risk Assessment Tool.
- 3.1.4 Based on the point-of-care risk assessment, use all Routine Practices including any appropriate Personal Protective Equipment (PPE) required to prevent transmission of infectious agents from client-to-client, from client-to-staff, from staff-to-client, and from staff-to-staff. (Refer to Appendix 12: PIDAC's Routine Practices Fact Sheet for All Health Care Settings; and Policy 3.3: Use of Personal Protective Equipment)
- 3.1.5 Health care facilities should implement practices to minimize the risk of transmission of infections:
 - 3.1.5.1 Waiting Rooms:
 - 3.1.5.1.1 Efforts should be made to minimize crowding in waiting rooms
 - 3.1.5.1.2 Efforts should be made to assess clients as soon as possible and segregate or place quickly into a separate space those clients who may have a communicable disease
 - 3.1.5.2 Client Scheduling:
 - 3.1.5.2.1 If possible clients known to have a fever or rash should be scheduled at the end of the day or at times when fewer clients are present.
 - 3.1.5.3 Triage of Clients:
 - 3.1.5.3.1 All health care setting staff should be educated by the nurse in charge (NIC) to be alert to clients presenting or calling by telephone who have symptoms of infection such as cough, diarrhea, rashes etc.
 - 3.1.5.3.2 Health facility staff should notify clinical staff of their observations to enable a rapid placement into a separate room or space (where possible)

3.1.5.3.3 Clients with known communicable diseases or exhibiting symptoms of infection such as cough, diarrhea, rashes, etc. should be given a procedure mask to apply; then be asked to clean hands with alcohol based hand rub, and be escorted into a room with the door / curtain closed (where possible)

3.1.5.4 Transfer of Clients:

- 3.1.5.4.1 If a client is to be transferred (to a hospital etc.), the staff member notifies the receiving facility, as well as staff involved in the transfer process, of the potential infectious disease so appropriate precautions may be implemented.
- 3.1.5.4.2 Staff are responsible to implement appropriate barriers/PPE specific to the situation prior to transport e.g. mask on patient, wound covered, etc.

3.1.6 Reporting of Reportable Diseases:

- 3.1.6.1 Staff members must report all reportable diseases as per provincial reporting requirements (Ontario Regulations 559/91 and amendments under the Health Protection and Promotion Act (HPPA)) to the local Medical Officer of Health. (Refer to Appendix 14: Reportable Disease List)
- 3.1.6.2 Staff must also complete a Reportable Disease Form which can be accessed at OneHealth intranet site (https://www2.onehealth.ca/) and submit it to the Communicable Disease Nurse
- 3.2 Risk Assessment for Acute Respiratory Infection (Including Influenza):
 - 3.2.1 All staff are expected to obtain annual influenza immunization in order to protect themselves and their clients. (Refer to Policy 1.1: Staff Immunization).
 - 3.2.2 Staff should refer to Appendix 15: Initial Decision-making for Those Presenting with ARI to determine, the precautions, treatment and reporting for clients presenting for care with an ARI;
 - 3.2.3 Active and/or passive screening should take place in all FNIHB OR health care facilities for staff and for clients. Refer to Appendix 16: Form for Active Case Finding of Acute Respiratory Infection on Entry to Health Care Settings.
 - 3.2.4 In health care centres where age, language or disability may be a barrier to a client reading a sign and following instructions, **both** active and passive screening should be utilized.
 - 3.2.5 During times of increased ARI activity, all FNIHB health facilities should use **both** methods of screening.

3.2.6 Passive Case Screening:

- 3.2.6.1 Post visual alerts (signage) at the entrance to the facility. (Refer to Appendix 17: Signage for Passive Case Finding of Acute Respiratory Infection).
- 3.2.6.2 Signage should instruct clients, persons who accompany them (friends and family), and visitors to:
 - 3.2.6.2.1 Inform health care personnel of symptoms of a respiratory infection when they enter the building or first register for care
 - 3.2.6.2.2 Practice Respiratory Hygiene/Cough Etiquette which includes:
 - o Cover the nose/mouth when coughing or sneezing
 - o Apply a mask, and perform hand hygiene.
 - If unable to tolerate wearing a mask, ask the client to use tissues to contain respiratory secretions and dispose of them in the nearest waste receptacle after use
 - Perform hand hygiene after having contact with respiratory secretions and contaminated objects/materials
 - Ensure that ABHR, tissues, and no-touch receptacles are available and conveniently located in waiting areas for clients and visitors

3.2.7 Active Case Screening:

- 3.2.7.1 Upon arrival at the health care setting, all clients should be asked about possible respiratory symptoms using a questionnaire (Refer to Appendix 16: Sample Form for Active Case Finding of Acute Respiratory Infection on Entry to Health Care Settings).
- 3.2.7.2 The individual asking the initial questions should maintain at least 2 meters distance from the client or be protected by a glass or other solid, transparent barrier.
- 3.2.8 If a client or visitor is exhibiting symptoms of an ARI, Routine Practices and Additional Precautions for Acute Respiratory Infection should be applied (Refer to Appendix 18: Elements That Comprise Droplet and Contact Precautions for Acute Respiratory Infection (In Addition to Routine Practices)
 - 3.2.8.1 Client should be offered a procedure or surgical mask to contain respiratory secretions. If the client is unable to tolerate a mask (e.g. children, chronic breathing problem etc.) they should be encouraged to use another method to cover their mouth and nose when coughing or sneezing (e.g. tissue).
 - 3.2.8.2 Client should be asked to perform hand hygiene.
 - 3.2.8.3 Client should be advised to practice respiratory etiquette when coughing or sneezing.

- 3.2.8.4 Maintain a spatial separation of at least 2 meters between other clients.
- 3.2.8.5 If space is available, separate clients with symptoms of ARI (use draw curtain etc.)
- 3.2.9 Documentation of ARI: It is necessary to assess each client on their initial encounter with the health facility for symptoms of an ARI and to document that the assessment has been completed. However, it is not necessary to maintain a separate paper document. The following methods of documentation are acceptable:
 - 3.2.9.1 Use a written tool such as that found in Appendix 16: Form for Active Case Finding of Acute Respiratory Infection. This tool becomes part of the client's health record OR,
 - 3.2.9.2 Make a note on the client chart when an ARI has been identified and document that contact/droplet precautions and barriers have been initiated.
- 3.2.10 Assessment in Home Care Setting:
 - 3.2.10.1 Prior to an initial home visit, the health care provider should inquire via telephone or before entering the home, about the presence of ARI symptoms prior to providing any services.
 - 3.2.10.2 For subsequent visits, the client may be asked to self-assess (if capable) for symptoms of ARI and to notify staff either prior to the visit, or if not possible when staff arrive at the home. If client is not capable, upon arrival at the home, the staff member can ask about any symptoms of ARI prior to providing services.
- 3.2.11 Surveillance and Reporting of ARI:
 - 3.2.11.1 Local surveillance of ARI should be done routinely in communities with primary care facilities (i.e. nursing stations) located on reserve. (Refer to Appendix 19: Influenza-Like Illness Surveillance Protocol)
 - 3.2.11.2 Local surveillance of illness should be done routinely in communities with health centres through monitoring in schools and day care centers on reserve (Refer to Appendix 20: School Absenteeism Surveillance Protocol.
 - 3.2.11.3 Although individual cases of ARI are not reportable under the Health Protection and Promotion Act, unusual clusters of ARI should be reported to the respective Communicable Disease Nurse and Zone Nursing Officer who in turn can provide advice and contact public health officials if warranted. Effective communication with public health partners can assist in early identification of any outbreak.

4 APPENDICES

Appendix 12: PIDAC Ministry of Health and Long-Term Care Ontario. (2012). PIDAC's Routine Practices Fact Sheet for All Health Care Settings. p. 63

Appendix 13: Public Health Ontario. (2012). Risk Assessment Tool, Infection Prevention and Control Reference Tool for Care Providers in the Community. p. 5

Appendix 14: Reportable Disease List

Appendix 15: Public Health Ontario. (2013). Initial Decision-making for Those Presenting with ARI. Best practices for prevention of acute respiratory infection in all health care settings.

Appendix 16: Public Health Ontario. (2013). Sample Form for Active Case Finding of Acute Respiratory Infection. Best practices for prevention of acute respiratory infection in all health care settings.

Appendix 17: Public Health Ontario. (2013). Sample Signage for Passive Case Finding of Acute Respiratory Infection at Entrance to Health Care Facilities. Best practices for prevention of acute respiratory infection in all health care setting.

Appendix 18: Public Health Ontario. (2013). Elements That Comprise Droplet and Contact Precautions for Acute Respiratory Infection (in addition to Routine Practices). Best practices for prevention of acute respiratory infection in all health care setting.

Appendix 19: Health Canada. (2015). Influenza-Like Illness (ILI) Surveillance Protocol. OneHealth website:

https://www2.onehealth.ca/Portals/4/Ontario/PHU/Comm%20Disease/Emergencies/Influenza/ILI%20Surveillance%20Protocol%20April%202013.pdf

Appendix 20: Health Canada. (2015). School Absenteeism Surveillance Protocol. OneHealth website: https://www2.onehealth.ca/Portals/4/Ontario/PHU/Comm%20Disease/Emergencies/Influenza/SCHOOL%20ABSENTEEISM%20SURVEILLANCE%20July16%202013.pdf

5 REFERENCES

Bennett, G. (2009). Infection Prevention Manual for Ambulatory Care. Washington, D.C.: Association for Professionals in Infection Control and Epidemiology

Friedman, C. & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Ontario. (2012). Routine Practices and Additional Precautions in All Health Care Settings. 3rd edition. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP All HealthCare Settings Eng2012.pdf

Public Health Ontario. (2013). Annex B– Best Practices for Prevention of Transmission of Acute Respiratory Infection. Annexed to: Routine Practices and Additional Precautions in All Health Care Settings. Retrieved from: http://www.publichealthontario.ca/en/eRepository/PIDAC-IPC Annex B Prevention Transmission ARI 2013.pdf

Public Health Ontario. (2011). Infection Prevention and Control Reference Tool for Health Care Providers in the Community. Retrieved from: https://www.healthunit.com/uploads/health-care-providers-reference-tool.pdf

Service Ontario. (2008). Health Promotion and Protection Act: Specification of Reportable Diseases. Retrieved from: http://www.e-laws.gov.on.ca/html/regs/english/elaws regs 910559 e.htm

Section 3: **Routine Practices** Policy number: **3.3**

Subject: Use of Personal Protective Issued: September 2015

Equipment

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 The key to implementing Routine Practices is the assessment of risk before each client interaction, taking into consideration events, circumstances and practices to determine if there may be a risk of exposure, and if so, which exposure controls are required. The selection of personal protective equipment (PPE) is based on the nature of the interaction with the client and/or the likely mode(s) of transmission of infectious agents. Improper use of PPE can lead to the spread of germs and increased risk of infection for staff and clients.

2 POLICY

2.1 Based on the point-of-care risk assessment, staff must use all appropriate strategies of Routine Practices, including the use of appropriate personal protective equipment (PPE) to reduce the transmission of infectious agents from client-to-client, from client-to-staff, from staff-to-client, and from staff-to-staff.

3 PROCEDURE

- 3.1 Risk Assessment: (Refer to Policy 3.2: Risk Assessment Including Acute Respiratory Infection)
 - 3.1.1 Staff must incorporate the risk assessment into daily practice. A risk assessment must be done **before each interaction** with a client and his/her environment in order to determine which interventions are required to prevent transmission of microorganisms.
 - 3.1.2 Based on the point-of-care risk assessment, staff must don Personal Protective Equipment (PPE) to prevent transmission of infectious agents from client-to-client, from client-to-staff, from staff-to-client, and from staff-to-staff. (Refer to Appendix 12: Routine Practices Fact Sheet for All Health Care Settings)
- 3.2 Use of Personal Protective Equipment:
 - 3.2.1 Personal Protective Equipment (PPE) is used to prevent exposure, by placing a barrier between the infectious source and the staff member's own mucous membranes, airways, skin and clothing. The selection of PPE is based on the nature of the interaction with the client and/or the likely mode(s) of transmission of infectious agents. Improper use of PPE, or improper doffing of PPE as well as hand hygiene, can lead to the spread of germs and increased risk of infection for staff and clients.

3.2.2 Hand Hygiene:

- 3.2.2.1 Compliance with the 4 moments of hand hygiene should always be the first consideration.
- 3.2.2.2 Hand hygiene must always be performed BEFORE handling and donning PPE, and after removing or doffing PPE. (Refer to Policy 2.1: Hand Hygiene; Policy 2.2: Hand Care Protection Program; Policy 2.3: Placement of Hand Hygiene Products.)

3.2.3 Gloves

- 3.2.3.1 Gloves must be worn when it is anticipated that the hands will be in contact with mucous membranes, non-intact skin, tissue, blood, body fluids, secretions, excretions or equipment and environmental surfaces contaminated with the above.
- 3.2.3.2 Gloves are **not** required for routine health care activities in which contact is limited to **intact skin** of the client (e.g. taking blood pressure, temperature, applying oximeter, or transporting a client) unless additional precautions are indicated. However, compliance with the 4 moments of hand hygiene should always be the first consideration.
- 3.2.3.3 Assess and select the best glove for a given task. Selection of gloves should be based on a risk assessment of:
 - 3.2.3.3.1 The type of setting (e.g. environmental cleaning, laboratory)
 - 3.2.3.3.2 The task that is to be performed (e.g. invasive or non-invasive)
 - 3.2.3.3.3 The likelihood of exposure to body substances
 - 3.2.3.3.4 The anticipated length of use
 - 3.2.3.3.5 The amount of stress on the glove
- 3.2.3.4 Appropriate Glove Use:
 - 3.2.3.4.1 Select glove appropriate to task (See table 1 below).
 - 3.2.3.4.2 Select the correct size of gloves.
 - 3.2.3.4.3 Gloves should be put on immediately before the activity for which they are indicated.
 - 3.2.3.4.4 Perform hand hygiene before putting on gloves.

- 3.2.3.4.5 Gloves must be removed and discarded and hand hygiene performed immediately after the activity for which they were used. Change gloves if changing to a different task with the same client or when providing care to more than one client.
 - o Remove gloves using a glove-to-glove/skin-to-skin technique as per Appendix 21: Recommended Steps for Putting On and Taking Off Personal Protective Equipment.
 - o Discard immediately into waste receptacle
- 3.2.3.4.6 When wearing gloves change or remove gloves in the following situations: after touching a patient; after touching a contaminated site, and before touching a clean site for the same client, or before or after touching the environment. Gloves must be task specific.
- 3.2.3.4.7 Do not wash or re-use gloves.
- 3.2.3.5 Household utility gloves are only acceptable for cleaning in non-patient care areas, with the exception of public washrooms. Sandwich-making style gloves are not appropriate for any purpose in the health care setting.
- 3.2.3.6 Heavy duty gloves are recommended if the task has a high risk for percutaneous injury (e.g. sorting linen, handling waste).

Table 1: MEDICAL GLOVES – Advantages and Disadvantages

Type	Use	Advantages	Disadvantages
Vinyl	Protection for: • Minimal exposure to blood/body fluids/infectious agents • Contact with strong acids and bases, salts, alcohols Protection for staff with documented skin breakdown	Good level of protection but based on the quality of manufacturer Medium chemical resistance	Not recommended for contact with solvents, aldehydes, ketones Quality varies with manufacturers Punctures easily when stressed
Latex (Many organizations have gone latex free due to patient and staff safety reasons. Where latex was used, they now require Nitrile gloves.)	Activities that require sterility Protection for: • Heavy exposure to blood/body fluids/infectious agents • Contact with weak acids and bases, alcohols	Good barrier qualities Strong and durable Has re-seal qualities Good comfort and fit Good protection from most caustics and detergents	Rigid – non elastic Not recommended for contact with oils, greases and organics Not recommended for individuals in the vicinity of those who have allergic reactions or sensitivity to latex

Nitrile	Available as sterile, or non- sterile. Protection for: • Heavy exposure to blood/body fluids/infectious agents • Tasks of longer duration • Tasks with high stress on glove • Tasks requiring additional dexterity • Chemicals and chemotherapeutic agents Recommended for contact with oils, greases, acids, bases Sensitivity to vinyl Preferred replacement for vinyl gloves when a documented allergy or	Offers good dexterity Strong and durable Puncture-resistant Good comfort and fit Excellent resistance to chemicals Use with hazardous medication handling or administration • One pair for Category 2 medication. • Two pairs for Category 1 Hazardous medication, or contact with body fluids of client on these medications.	Not recommended for contact with solvents, ketones, esters
Neoprene	sensitivity occurs Replacement sterile glove for latex when a documented allergy or sensitivity occurs Recommended for contact with acids, bases, alcohols, fats, oils, phenol, glycol ethers	Good barrier qualities Strong and durable Good comfort and fit Good protection from caustics	Not recommended for contact with solvents

Table adapted from: Routine Practices and Additional Precautions in All Health Care Settings, (2012). Page, 72.

3.2.1 Gowns

- 3.2.1.1 A gown is worn when it is anticipated that a procedure or care activity is likely to generate splashes or sprays of blood, body fluids, secretions, or excretions. NOTE: **A gown is only worn once**.
- 3.2.1.2 Long-sleeved gowns protect the forearms and clothing of the health care provider from splashing and soiling with blood, body fluids and other potentially infectious material.
- 3.2.1.3 The type of gown selected is based on the nature of the interaction with the client including:
 - 3.2.1.3.1 Anticipated degree of contact with infectious material

- 3.2.1.3.2 Potential for blood and body fluid penetration of the gown (e.g. water-resistant gowns should be used when soaking is anticipated)
- 3.2.1.3.3 Requirement for sterility (e.g. sterile gowns are worn in operating theatres and when performing sterile procedures such as central line insertions
- 3.2.1.4 Gowns used as PPE should be cuffed and long-sleeved, and offer full coverage of the body front, from neck to mid-thigh or below.
- 3.2.1.5 Clinical and laboratory coats or jackets are not a substitute for gowns where a gown is indicated.
- 3.2.1.6 Several gown sizes should be available in a health care setting to ensure appropriate coverage for staff
- 3.2.1.7 Appropriate Gown Use:
 - 3.2.1.7.1 Perform hand hygiene before applying / handling a clean gown.
 - 3.2.1.7.2 When use of gown is indicated, the gown should be put on immediately before the task and must be worn properly, i.e. tied at top and around the waist. (Refer to Appendix 21: Recommended Steps for Putting on and Taking Off Personal Protective Equipment)
 - 3.2.1.7.3 Remove gown immediately after the task for which is has been used in a manner that prevents contamination of clothing or skin and prevents agitation of the gown. (Refer to Appendix 21: Recommended Steps for Putting on and Taking Off Personal Protective Equipment)
 - 3.2.1.7.4 Discard used gown immediately after removal into appropriate receptacle.
 - 3.2.1.7.5 Do not –re-use gown.
 - 3.2.1.7.6 Do not go from client—to-client wearing the same gown.
 - 3.2.1.7.7 Gowns should be worn when cleaning soiled equipment.
- 3.2.2 Masks with visor or eye protection:
 - 3.2.2.1 A mask is used by a health care provider (in addition to eye protection) to protect the mucous membranes of the nose and mouth when it is anticipated that a procedure or care activity is likely to generate splashes or sprays of blood, body fluids, secretions or excretions, or within two metres of a coughing client.
 - 3.2.2.1.1 A mask with eye protection is required when performing aseptic procedures (e.g. suctioning, tracheostomy care, irrigation, gastrostomy medication or fluid administration.

- 3.2.2.1.2 A mask (no eye protection) should be placed on a coughing client, if tolerated, to limit dissemination of infectious respiratory secretions. This will prevent direct and indirect transmission.
- 3.2.2.1.3 A mask with eye protection should be worn for wound irrigation procedures.
- 3.2.2.2 Mask selection is based on a risk assessment that includes:
 - 3.2.2.2.1 Type of procedure/care activity
 - 3.2.2.2. Length of procedure/care activity
 - 3.2.2.2.3 Likelihood of contact with droplets/aerosols generated by the procedure or interaction
- 3.2.2.3 Criteria for selecting masks with eye protection include:
 - 3.2.2.3.1 Mask should securely cover the nose and mouth and eyes for HCP
 - 3.2.2.3.2 Mask should be fluid resistant to prevent droplet penetration
 - 3.2.2.3.3 Mask should be able to perform for the duration of the activity for which the mask is indicated
- 3.2.2.4 Appropriate Mask Use:
 - 3.2.2.4.1 Select a mask appropriate to the activity
 - 3.2.2.4.2 Perform hand hygiene before applying mask (note: germs on hands can contaminate the mask that staff will be breathing through).
 - 3.2.2.4.3 Mask should securely cover the nose and mouth
 - 3.2.2.4.4 Change mask if it becomes wet
 - 3.2.2.4.5 Do not touch mask while wearing it
 - 3.2.2.4.6 Remove mask correctly immediately after completion of task and discard into an appropriate waste receptacle (Refer to Appendix 21: Recommended Steps for Putting on and Taking Off Personal Protective Equipment)
 - 3.2.2.4.7 Do not allow mask to hang or dangle around the neck
 - 3.2.2.4.8 Clean hands after removing the mask
 - 3.2.2.4.9 Do not re-use disposable masks
 - 3.2.2.4.10 Do not fold the mask or put it in a pocket for later use.
- 3.2.2.5 Types of Masks:
 - 3.2.2.5.1 A **surgical / procedure mask** is used (in addition to eye protection) to protect the mucous membranes of the nose and mouth when it is

- anticipated that a procedure or care activity is likely to generate splashes or sprays of blood, body fluids, secretion or excretions, or when within two meters of a coughing client.
- 3.2.2.5.2 An **N95 respirator** is used to prevent inhalation of small particles that may contain infectious agents transmitted via the <u>airborne</u> route (e.g. tuberculosis or those staff susceptible to measles or varicella or zoster).
 - N95 respirators may be recommended during a pandemic influenza outbreak
 - N95 respirators should be worn for aerosol-generating medical procedures that have been shown to expose staff to undiagnosed tuberculosis, including sputum induction
 - NOTE: Staff must be fit tested bi-annually for N95 respirators and must only wear that particular model of respirator for which they were fit tested. (Refer to FNIHB Respiratory Protection Plan).
- 3.2.2.5.3 **P100 respirator** for which the staff was fit tested should be worn when there is a risk of exposure to mould, asbestos or lead when it is disturbed.

3.2.2.6 Eye Protection

- 3.2.2.6.1 Eye protection is used by health care providers (in addition to a mask) to protect the mucous membranes of the eyes when it is anticipated that a procedure or care activity is likely to generate splashes or sprays of blood, body fluids, secretions or excretions, or within two metres of a coughing client. Eye protection should also be worn for wound irrigation procedures if there is any risk of sprays or splashes, or when cleaning soiled equipment.
- 3.2.2.6.2 Eye protection includes:
 - o Safety glasses
 - Safety goggles
 - o Face shields
 - Visors attached to masks
- 3.2.2.7 Eye protection should be comfortable, not interfere with visual acuity and fit securely.
- 3.2.2.8 The eye protection chosen for specific situations depends on:
 - 3.2.2.8.1 The type of activity and risk of exposure
 - 3.2.2.8.2 The circumstances of exposure (e.g. droplet exposure vs. sprays/splashes of fluid)
 - 3.2.2.8.3 Other PPE used
 - 3.2.2.8.4 Personal vision needs

- 3.2.2.9 Criteria for selecting eye protection includes:
 - 3.2.2.9.1 Eye protection must provide a barrier to splashes from the side
 - 3.2.2.9.2 Eye protection must be single-use
- 3.2.2.10 Appropriate Use of Eye Protection:
 - 3.2.2.10.1 Eye protection should be used whenever there is a potential for splashes or sprays to the eyes, such as during wound irrigation.
 - 3.2.2.10.2 Eye protection must be removed immediately after the task for which it was used and discarded into waste. (Refer to Appendix 21:

 Recommended Steps for Putting on and Taking Off Personal Protective Equipment)
 - 3.2.2.10.3 NOTE: Only disposable eye protection will be used by FNIHB staff
 - 3.2.2.10.4 Prescription eye glasses are **not acceptable** as eye protection.

Table 2: Eyewear

use,

Source: Routine Practices and Additional Precautions in All Health Care Settings, November 2012. Page 73

4 APPENDICES

Appendix 12: Public Health Ontario. (2012). PIDAC's Routine Practices Fact Sheet for All Health Care Settings.

Appendix 21: Public Health Ontario. (2012). Routine Practices and Additional Precautions in all Health Care Settings. Recommended Steps for Putting on and Taking off Personal Protective Equipment (PPE).

5 REFERENCES

3M. (2013). The Power to Protect Your World: Respirator Selection Guide. Retrieved from: http://multimedia.3m.com/mws/media/639110O/3m-respirator-selection-guide.pdf

Canadian Standards Association. Z94.3-07 Eye and Face Protectors

Canadian Standards Association Z94.4-11 Selection, Use and Care of Respirators.

Canadian Standards Association Z314.10.1-10. Selection and use of gowns, drapes and wrappers in health care

Ontario Regulation 278/05. Asbestos on Construction Projects and in Buildings and Repair Operations. Retrieved from: http://www.e-laws.gov.on.ca/html/regs/english/elaws regs 050278 e.htm#BK11

Public Health Agency of Canada. (2013). Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html

Public Health Ontario. (2012). Routine Practices and Additional Precautions in All Health Care Settings. 3rd edition. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP All HealthCare Settings Eng2012.pdf

Public Health Ontario. (2012). Infection Prevention and Control Reference Tool for Health Care Providers in the Community. Retrieved from: https://www.healthunit.com/uploads/health-care-providers-reference-tool.pdf.

Section 3: **Routine Practices** Policy number: **3.4**

Subject: Control of the Environment Issued: September 2015

Distribution: All FNIHB Staff Revised:

1 PURPOSE

1.1 Controlling the environment includes measures that are built into the infrastructure of the health care setting that have been shown to reduce the risk of infection to staff and clients, such as appropriate placement of clients, hand washing sinks and point-of-care alcohol-based hand rub. It also includes cleaning practices of client care equipment and engineering controls such as point-of-care sharps containers, safety engineered medical devices, and barriers in reception areas.

2 POLICY

2.1 The physical environment of a health care setting can harbor many microorganisms that are capable of causing infection in susceptible individuals. Staff must ensure that all environmental controls within the health care setting are in place and that cleaning of equipment and the health care environment is being performed according to best practices to provide for a safe and sanitary environment.

3 PROCEDURE

- 3.1 Controlling the environment includes considerations such as:
 - 3.1.1 Client placement while in the clinic setting
 - 3.1.2 Client equipment that is in good repair
 - 3.1.3 Effective cleaning practices for equipment and the environment
- 3.2 Engineering controls, such as point-of-care ABHR and sharps containers are the <u>preferred</u> controls as they do not depend on individual health care provider compliance.
- 3.3 Client Placement: For clients who have symptoms of an acute respiratory infection (ARI) (Refer to Policy 3.2: Risk Assessment Including Acute Respiratory Infection)
 - 3.3.1 The client should be provided a procedure mask to wear, and instructed on hand hygiene and respiratory etiquette
 - 3.3.2 If masks are not available or not tolerated, clients should be encouraged to use another method to cover their mouth and nose when coughing or sneezing.

- 3.3.3 Move client out of the waiting area to a separate area or room as soon as possible
- 3.3.4 Maintain a spatial separation of at least 2 metres between the coughing client and others in the room. If there is more than one client receiving care in a clinic room setting, a privacy curtain, if available, should be drawn between beds
- 3.3.5 If there is a suspicion that the infection is transmitted via the airborne route, the client must be moved into a separate room and if warranted transferred to a health facility preferably with a negative pressure single room
- 3.3.6 Staff caring for a client with suspected airborne transmitted infections must wear a fit tested and seal checked N95 respirator as per Respiratory Protection Plan. (Refer to FNIHB-OR Respiratory Protection Plan) (Refer to Section 4.0: Additional Precautions).
- 3.4 Cleaning of the Environment: The physical environment of a health care facility can harbor many microorganisms that are capable of causing infection in susceptible individuals. Maintaining a clean and safe healthcare environment is an essential component of IPAC and is integral to the safety of clients.
 - 3.4.1 Refer to Section 8.0: Environmental Cleaning Principles of Cleaning and Disinfection Environmental Surfaces
 - 3.4.2 Refer to FNIHB-OR Environmental Cleaning Procedure Manual
- 3.5 Cleaning of Equipment: Health care facilities must have cleaning and disinfection practices in place to ensure adequate disinfection of contaminated surfaces. Any equipment used on more than one client must be appropriately cleaned and disinfected according to the type of equipment.
 - 3.5.1 Refer to Section 9.0 Cleaning, Disinfection and Sterilization of Medical Equipment/Medical Devices
 - 3.5.2 Refer to FNIHB OR Environmental Cleaning Procedure Manual
- 3.6 Handling of Waste Including Sharps:
 - 3.6.1 Only safety engineered medical devices will be used.
 - 3.6.2 No recapping needles or scalpels
 - 3.6.3 Place used devices into a sharps container by the person who used the device
 - 3.6.4 Do not fill the sharps container beyond the fill level.
 - 3.6.5 Refer to Section 8.0: Environmental Cleaning Principles of Cleaning and Disinfection Environmental Surfaces
 - 3.6.6 Refer to FNIHB OR Environmental Cleaning Procedure Manual

3.7 Handling of Linen:

- 3.7.1 Refer to Section 8.0: Cleaning and Disinfection of the Environment
- 3.7.2 Refer to FNIHB- OR Environmental Cleaning Procedure Manual

3.8 Hand Hygiene Equipment:

- 3.8.1 ABHR should be available for use at the point-of-care for health care providers
- 3.8.2 Hand washing sinks for health care providers and visitors should be placed at convenient locations so that staff do not need to travel a long distance to reach the sink
- 3.8.3 Refer to Policy 2.1: Hand Hygiene, Policy 2.2: Hand Care Protection Program, Policy 2.3: Placement of Hand Hygiene Products

4 REFERENCES

First Nation & Inuit Health Branch-Ontario Region (FNIHB-OR). (2013). Environmental Cleaning Procedure Manual.

Public Health Agency of Canada. (2013). Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care Settings. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html

Public Health Ontario. (2013). Best Practices for Cleaning, Disinfection and Sterilization of Medical Equipment/Devices. 3rd ed. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/PIDAC_Cleaning_Disinfection_and_Sterilization_201 3.pdf

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in All Health Care Settings. 2nd ed. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Public Health Ontario. (2012). Routine Practices and Additional Precautions in All Health Care Settings. 3rd edition. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP All HealthCare Settings Eng2012.pdf

Section 3: **Routine Practices** Policy number: **3.5**

Subject: Administrative Controls Issued: September 2015

Distribution: All FNIHB Staff Revised:

1 POLICY

1.1 Administrative controls, such as IPAC policies and procedures, education of staff and clients, healthy workplace policies, and staff immunization are measures put in place by FNIHB to protect staff and clients from infection. All staff must be familiar with administrative controls and adhere to these measures.

2 PROCEDURE

- 2.1 Administrative controls are measures that are put into place to protect staff and clients from infection and include:
 - 2.1.1 Staff Education and Training
 - 2.1.2 Education of Clients
 - 2.1.3 Respiratory Etiquette
 - 2.1.4 Healthy Workplace Policies and Procedures
 - 2.1.5 Staff Immunization
- 2.2 Staff Education and Training:
 - 2.2.1 IPAC Education is a requirement for all FNIHB OR staff who work in a health facility
 - 2.2.2 All new hires will be provided with IPAC education by the hiring manager/coordinator or designate at the initiation of employment as part of the orientation program.
 - 2.2.3 All existing staff will receive IPAC education via their manager or designate on an annual basis as part of ongoing continuing education.
 - 2.2.3.1 IPAC education should include, but is not limited to the following concepts:
 - 2.2.3.1.1 Disease transmission, the risks associated with infectious diseases and basic epidemiology of health care-associated infection specific to the care setting
 - 2.2.3.1.2 Importance of maintaining immunizations

- 2.2.3.1.3 Hand hygiene, including proper use of alcohol-based hand rubs and hand washing
- 2.2.3.1.4 Principles and components of Routine Practices as well as Additional Precautions
- 2.2.3.1.5 Assessment of the risk of exposure and the appropriate use of and indications for PPE, including safe application, removal and disposal
- 2.2.3.1.6 Appropriate cleaning and/or disinfection of health care equipment, supplies and surfaces or items in the health care environment
- 2.2.3.1.7 Individual staff responsibility for keeping clients, themselves and coworkers safe
- 2.2.3.1.8 Education in early problem or symptom recognition

2.3 Education of Clients:

- 2.3.1 Client teaching should include:
 - 2.3.1.1 Correct hand hygiene when to perform and how
 - 2.3.1.2 Basic hygiene practices that prevent the spread of microorganisms, such as respiratory etiquette
 - 2.3.1.3 Not sharing personal items

2.4 Respiratory Etiquette:

- 2.4.1 Staff, clients, and visitors should understand the personal practices that help prevent the spread of microorganisms that cause respiratory infections. These personal practices include:
 - 2.4.1.1 Not visiting in a health care facility when ill with an acute respiratory infection, an infectious rash, or with vomiting and diarrhea illnesses
 - 2.4.1.2 Avoidance measures that minimize contact with droplets when coughing or sneezing such as:
 - 2.4.1.2.1 Turning head away from others
 - 2.4.1.2.2 Maintaining a two-meter separation from others
 - 2.4.1.2.3 Covering the nose and mouth with tissue
 - 2.4.1.2.4 Coughing into the sleeve
 - 2.4.1.2.5 Immediate disposal of tissues into waste receptacles after use
 - 2.4.1.2.6 Immediate hand hygiene after disposal of tissue

2.5 Healthy Workplace Policies:

- 2.5.1 As part of the IPAC education orientation, staff will be advised that it is an expectation that staff do not come in to work when ill with symptoms that are of an infectious origin
- 2.5.2 Staff working in health care settings who develop an infectious illness **may** be subject to some work restrictions. (Refer to Policy 1.4: Management of Occupational Accidental Exposure to Infectious Diseases).

2.6 Staff Immunization

2.6.1 All FNIHB staff are expected to meet current immunization recommendations and to maintain up-to-date immunization status as outlined in the current edition of the Health Canada Occupational Health Assessment Guidelines (OHAG) Annex O (and as recommended by the National Advisory Committee on Immunization (NACI) Canadian Immunization Guide, current edition. (Refer to Policy 1.1: Staff Immunization, Policy 1.2: Staff Tuberculin Skin Test Screening/Assessment)

3 REFERENCES

Health Canada. (2012). Occupational Health Assessment Guide. Retrieved from: <a href="http://publiservice.gc.ca/services/rapb-dgrp/psohp-pstfp/assets/pdf/ohag-gest/oh

Public Health Agency of Canada. (2013). Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html

Public Health Ontario. (2012). Routine Practices and Additional Precautions in All Health Care Settings. 3rd edition. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP_All_HealthCare_Settings_Eng2012.pdf

SECTION 4: ADDITIONAL PRECAUTIONS

Section 4: Additional Precautions Policy number: 4.1

Issued: September 2015

Subject: Additional Precautions:

Overview Revised:

Distribution: All FNIHB Staff

1 PURPOSE

- 1.1 Additional Precautions (AP) refer to infection prevention and control interventions (e.g. PPE, client placement, additional environmental cleaning), to be used **in addition to** Routine Practices to protect staff and clients by interrupting transmission of suspected or identified infectious agents.
- 1.2 Additional Precautions are based on the mode of transmission. There are three categories of Additional Precautions: Contact Precautions, Droplet Precautions and Airborne Precautions as well a combination of precautions such as droplet plus contact.

2 POLICY

2.1 When a client is either identified or suspected of having an infection with a potentially infectious agent, all staff must utilize Additional Precautions in addition to Routine Practices to protect themselves and the client, and to prevent or limit the transmission of an infectious agent.

3 PROCEDURE

- 3.1 Elements that comprise Additional Precautions in community settings include:
 - 3.1.1 Client Placement and Signage:
 - 3.1.1.1 If a client is either identified or suspected of having an infection with a potentially infectious agent, a risk assessment should be done and the client moved to a separate room if possible. (Refer to Appendix 22: Performing a Risk Assessment Related to Routine Practices and Additional Precautions).
 - 3.1.2 Signage specific to the type(s) of Additional Precautions should be posted:
 - 3.1.2.1 A sign that lists the required precautions should be posted at the entrance to the client treatment room
 - 3.1.2.2 Signage should maintain privacy by indicating only the precautions that are required, not information regarding the client's condition.
 - 3.1.2.3 For sample signage refer to Policy 4.2: Contact Precautions; Policy 4.3: Droplet Precautions; Policy 4.4: Contact and Droplet Precautions; Policy 4.5: Airborne Precautions.

3.1.3 Personal Protective Equipment (PPE)

3.1.3.1 PPE is specific to the type(s) of Additional Precautions that are in place (See four categories of AP below).

3.1.4 Dedicated Equipment

- 3.1.4.1 Equipment must be dedicated to the client whenever possible (e.g. in home settings)
- 3.1.4.2 Equipment and supplies that are required for an interaction should be assembled first and brought into the room after PPE has been put on. PPE must be removed before leaving the client's room.

3.1.5 Additional Cleaning Measures

3.1.5.1 Additional cleaning measures may be required for the client environment and shared equipment (Refer to Section 7.0: Cleaning and Disinfection of the Environment)

3.1.6 Client Movement in the Facility

- 3.1.6.1 Clients who are to be transported within the facility must be assessed to determine the risk of transmission to others.
- 3.1.6.2 For some conditions (such as tuberculosis, acute respiratory illness, acute gastroenteritis), limit movement of the client unless medically necessary

3.1.7 Communication

- 3.1.7.1 Effective communication regarding AP is essential when a client goes to another health care facility for testing, additional treatment etc.
- 3.1.7.2 Communication must include Emergency Medical Services (EMS) staff and other transport staff

3.2 Initiation of Additional Precautions (AP)

- 3.2.1 AP must be instituted as soon as symptoms suggestive of a transmissible infection are noted, not only when a diagnosis is confirmed. Contact the nurse in charge (NIC) or the communicable disease nurse if you have questions. (Refer to Policy 3.2: Risk Assessment including Acute Repertory Infection) (Refer to Appendix 22: Performing a Risk Assessment Related to Routine Practices and Additional Precautions)
- 3.2.2 AP should be considered before laboratory confirmation of status for clients believed to be at high risk of being infected with antibiotic-resistant organisms (AROs) such as CAMRSA.
- 3.2.3 Refer to Table 1: Clinical Syndromes Requiring Additional Precautions Pending Diagnosis for common clinical syndromes and to Appendix 23 for a complete list of syndromes and controls required.

3.3 Duration and Discontinuation of Additional Precautions

- 3.3.1 AP should remain in place until there is no longer a risk of transmission of the microorganism or illness, or the risk has been ruled out. Contact the nurse in charge (NIC), or the communicable disease nurse if you have questions or require advice. In some cases expert consultation may be required.
- 3.3.2 Where the periods of communicability are known, precautions may be discontinued at the appropriate time (Refer to Appendix 23: Clinical Syndromes/Conditions With Required Level Precautions)
- 3.3.3 It is important that AP not be used any longer than necessary and that frequent assessment of the risks of transmission be carried out

3.4 Categories of Additional Precautions:

- 3.4.1 There are four categories of AP based on transmission of the organism as well as a combination of both Contact and Droplet precautions.
 - 3.4.1.1 Contact Precautions
 - 3.4.1.2 Droplet Precautions
 - 3.4.1.3 Airborne Precautions
 - 3.4.1.4 Droplet + Contact Precautions

Table 1: Clinical Syndromes Requiring Additional Precautions Pending Diagnosis

Syndrome	Type of Precaution*	Move to Single Room?
Abscess or draining wound not		
contained by dressing	Contact	Yes
Diarrhea and/or vomiting of suspected		
acute infectious etiology	Droplet + Contact	Yes
Rash:	Airborne	Yes, with negative air flow (if
Suggestive of varicella or measles		available) and door closed.
		Only immune staff to enter.
Rash:	Routine Practices,	No
Undiagnosed, without fever	gloves for skin contact	
Respiratory infection: Acute, undiagnosed	Droplet + Contact	Yes
Respiratory Infection: Risk factors	Airborne + N95	Yes, with negative air flow (if
and symptoms suggestive of active	respirator and eye	available) and door closed
tuberculosis	protection	
Suspected meningitis and/or sepsis	Adult: Droplet	Yes
with petechial rash, etiology unknown		
	Pediatric: Droplet +	
	Contact (pediatric)	

*Contact Precautions: Gloves, gown if skin or clothing will come into direct contact with the client or their environment. Add mask ONLY if risk of splash/spray

*Droplet Precautions: Facial protection (mask, eye protection)

*Airborne Precautions: Airborne infection isolation room (if available); fit-tested N95 respirator for suspected tuberculosis, and eye protection

Source: PHO Routine Practices and Additional Precautions in All Health Care Settings, November 2012, Page 30

4 APPENDICES

Appendix 22: Public Health Ontario. (2012). Performing a Risk Assessment Related to Routine Practices and Additional Precautions.

Appendix 23: Public Health Ontario. (2012). Clinical Syndromes and Conditions with Required Level of Precautions.

5 REFERENCES

Bennett, G. (2009). Infection Prevention Manual for Ambulatory Care. Washington, D.C.: Association for Professionals in Infection Control and Epidemiology.

Friedman, C. & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Agency of Canada. (2013). Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care Settings. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html

Public Health Ontario. (2013). Environmental Cleaning Toolkit. Retrieved from http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental_Cleaning_Toolkit.a spx

Public Health Ontario. (2012). Routine Practices and Additional Precautions in all Health Care Settings. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP All HealthCare Settings Eng2012.pdf

Section 4: Additional Precautions Policy number: 4.2

Subject: Additional Precautions: Contact Issued: September 2015

Precautions

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

- 1.1 Contact Precautions are used **in addition to** Routine Practices for microorganisms where contamination of the environment or intact skin is a particular consideration, such as:
 - 1.1.1 Contamination of the client environment
 - 1.1.2 Infectious agents of very low infective dose (e.g. norovirus, rotavirus)
 - 1.1.3 Clients infected or colonized with microorganisms that may be transmitted by contact with intact skin or with contaminated environmental surfaces (e.g. scabies, MRSA, VRE and C. difficile).

2 POLICY

2.1 Staff must use Contact Precautions **in addition to** Routine Practices for clients known or suspected to have infectious diseases transmitted by direct patient contact or by contact with items in the client's environment. (Refer to Appendix 12: Routine Practices Fact Sheet for Health Care Settings).

3 PROCEDURE

- 3.1 **Contact Transmission:** is the most common route of transmission of infectious agents. There are two types of contact transmission:
 - 3.1.1 Direct Contact Transmission
 - 3.1.1.1 Occurs through touching e.g. an individual may transmit microorganisms to others by touching them.
 - 3.1.2 Indirect Contact Transmission
 - 3.1.2.1 Occurs when microorganisms are transferred via contaminated objects e.g. stethoscope used on multiple clients without cleaning the stethoscope between uses; or via hands touching a contaminated object, table, door knob, and then touching another object.
- 3.2 Elements That Comprise Contact Precautions in a Community Setting:

(Refer to Summary Table below)

(Refer to Appendix 24: Sample Signage for Contact Precautions)

3.2.1 Client Placement

3.2.1.1 In a clinic setting, place clients in an examination room or cubicle as soon as possible

3 2 2 Chart Identification

- 3.2.2.1 Flag the client's chart appropriately indicating precautions required
- 3.2.3 PPE (Gloves, Gown, Face Protection)
 - 3.2.3.1 Gloves and gown are required for activities that involve "direct care" where the staff member's skin or clothing may come in direct contact with the client or items in the client's space
 - 3.2.3.2 "Direct Care" includes but is not limited to things that may occur in a community setting such as physical examination, checking vital signs, dressing changes, or care of open wounds or lesions
 - 3.2.3.3 Facial protection should be used, as per Routine Practices, if spraying or splashing is possible (this may include someone who may vomit while you are in the room)
 - 3.2.3.4 Situations for appropriate PPE include, but are not limited to:
 - 3.2.3.4.1 Acute diarrhea
 - 3.2.3.4.2 Any skin rashes
 - 3.2.3.4.3 Draining, infected wounds with uncontained drainage
 - 3.2.3.4.4 Known or suspected infection or colonization with antibiotic resistant organisms
 - 3.2.3.5 Hand hygiene must be performed after doffing gloves and gowns (Refer to Appendix 21: Recommended Steps for Putting on & Taking off Personal Protective Equipment).

3.2.4 Cleaning of Equipment

- 3.2.4.1 Clean and disinfect shared items (e.g. chair, examination table, stethoscope, blood pressure cuff after each use)
- 3.2.4.2 Keep items in the treatment/care rooms covered with a cleanable cover if not a frequently used item (Refer to Section 7.0: Principles of Cleaning and Disinfecting Environmental Surfaces).
- 3.2.4.3 Keep supplies in treatment/care rooms to a minimum to prevent possible contamination and the need for disposal or additional cleaning and disinfection

3.2.5 Environmental Cleaning

- 3.2.5.1 Routine cleaning (Refer to Section 7.0: Principles of Cleaning and Disinfecting Environmental Surfaces).
- 3.2.5.2 No special handling is required for laundry but linens that are grossly soiled should be handled separately
- 3.2.5.3 Most garbage or waste can be disposed of as routine waste and can go to the local landfill as regular garbage
- 3.2.5.4 Any human blood waste and sharps waste must comply with packaging requirements according to local, provincial and federal guidelines (Refer to Policy 7.12: Management of Waste)

3.2.6 Communication

- 3.2.6.1 Effective communication regarding precautions must be given to clients, families, other facilities and transport services prior to transfer
- 3.2.6.2 Appropriate signage should be posted on the door of treatment room (Refer to Appendix 24: Sample Signage for Contact Precautions)
- 3.2.6.3 Visitors should receive education regarding hand hygiene. PPE is not required unless the visitor is providing direct care.

Table 1: Summary Table of Elements That Comprise Contact Precautions

Element	Ambulatory/Clinic Setting	Home Health Care
Accommodation	Door may be open Placement is on a case-by-case basis Identify clients who require precautions	No restrictions on accommodation
	Encourage client to perform hand hygiene on entering the setting	
Signage	Flag chart Sign on door if staying for longer duration	Flag chart
Gloves	For direct care	For direct care
Gown	For direct care	For direct care
Equipment and items in the environment	As per Routine Practices Chart (paper or mobile electronic) should not be taken into the client environment Clean and disinfect shared care items	As per Routine Practices

Environmental Cleaning	VRE and C. <i>difficile</i> rooms require special cleaning Routine cleaning for all other rooms	Routine household cleaning
Transport	Clean and disinfect equipment used for transport after use	N/A
Communication	Effective precautions must be communicated to client, families, other facilities and transport services prior to transfer	

Source: Adapted from PIDAC: Routine Practices and Additional Precautions in All Health Care Settings, November 2012. Page 35.

- 3.3 Some Common Organisms Requiring Contact Precautions:
 - 3.3.1 MRSA (Methicillin Resistant *Staphylococcus aureus*) (Refer to Appendix 25: CA-MRSA Fact Sheet)
 - 3.3.2 VRE (Vancomycin Resistant Enterococci) (Refer to Appendix 26: Vancomycin Resistant Enterococci)
 - 3.3.3 *Clostridium difficile* (Refer to Appendix 27: Clostridium difficile)
 - 3.3.4 Scabies (Refer to Appendix 28: Scabies)
 - 3.3.5 For other conditions and etiologies requiring Contact Precautions, refer to Appendix 29: Conditions/Clinical Presentations and Etiologies Requiring Contact Precautions

4 APPENDICES

Appendix 12: Public Health Ontario. (2012). PIDAC's Routine Practices Fact Sheet for all Health Care Settings.

Appendix 21: Public Health Ontario. (2012). PIDAC's Recommended Steps for Putting on and Taking Off Personal Protective Equipment

Appendix 24: Public Health Ontario. (2012). PIDAC's Sample Signage for Entrance to Room of a Patient Requiring Contact Precautions in all Health Care Settings.

Appendix 25: Health Canada – First Nation and Inuit Health Branch (FNIHB). CA-MRSA Toolkit: Methicillin-Resistant *Staphylococcus aureus* in the Community (CA-MRSA) Fact Sheet

Appendix 26: Public Health Ontario. (2011). Vancomycin Resistant Enterococci.

Appendix 27: Public Health Ontario. (2011). Clostridium difficile.

Appendix 28: Public Health Ontario. (2011). Scabies.

Appendix 29: Public Health Agency of Ontario. (2013) Conditions/Clinical Presentations and Etiologies Requiring Contact Precautions.

5 REFERENCES

Bennett, G. (2009). Infection Prevention Manual for Ambulatory Care. Washington, D.C.: Association for Professionals in Infection Control and Epidemiology

Friedman, C. & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Ontario – Regional Infection Control Networks. (2012). Environmental Cleaning Toolkit. Retrieved from

http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental_Cleaning_Toolkit.aspx

Public Health Ontario. (2011). Infection Prevention and Control Reference Tool Fact Sheets for Health Care Providers in the Community.

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in All Health Care Settings, 2nd Edition. Retrieved from: http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Public Health Agency of Canada. (2013). Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html

Public Health Ontario. (2012). Routine Practices and Additional Precautions in All Health Care Settings. 3rd Edition. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP_All_HealthCare_Settings_Eng2012.pdf

Section 4: Additional Precautions Policy number: 4.3

Subject: Additional Precautions: Droplet Issued: September 2015

Precautions

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 Droplet Precautions: are used in addition to Routine Practices for clients known or suspected of having an infection that can be transmitted by large respiratory droplets. Droplet transmission occurs when droplets carrying an infectious agent exit the respiratory tract of a person. Droplets can be generated by talking, coughing, or sneezing and by some procedures performed on the respiratory tract (e.g. suctioning or nebulized therapies). These droplets are propelled a short distance and may enter the host's eyes, nose or mouth or fall onto surfaces. Contact transmission can then occur by touching surfaces and objects contaminated with respiratory droplets.

2 POLICY

2.1 Health care providers must use Droplet Precautions in addition to Routine Practices for clients known or suspected to have an infection that can be transmitted by large respiratory droplets. Personal Protective Equipment (PPE) required to enter a room includes a procedure/surgical mask with visor, or mask and goggles. The ill client will be encouraged to wear a half face mask to contain respiratory droplets, and then be asked to perform hand hygiene.

3 PROCEDURE

- 3.1 Droplet Transmission:
 - 3.1.1 Occurs when droplets carrying an infectious agent exit the respiratory tract of a person
 - 3.1.2 Droplets can be generated when client talks, coughs, sneezes or sings
 - 3.1.3 Droplets can be generated through some procedures performed on the respiratory tract such as suctioning and nebulized therapies
 - 3.1.4 Droplets are propelled a short distance and may enter the host's eyes, nose or mouth of fall onto surfaces
 - 3.1.5 Droplets do not remain suspended in the air and usually travel < two metres
 - 3.1.6 Microorganisms contained in these droplets are then deposited on surfaces in the client's immediate environment and some microorganisms remain viable for extended periods of time

- 3.1.7 Contact transmission can occur by touching surfaces and objects contaminated with respiratory droplets.
- 3.1.8 Microorganisms transmitted by the droplet route include but are not limited to respiratory tract viruses (ARIs, influenza, rhinovirus, respiratory syncytial virus, rubella, mumps and *Bordetella pertussis*)
- 3.2 Droplet Precautions in a Health Care Setting:
 - 3.2.1 Droplet Precautions are always in addition to Routine Practices. (Refer to Appendix 12: Routine Practices Fact Sheet for all Health Care Settings)
 - 3.2.2 Ensure hand hygiene is performed by the client on presentation and departure from a health care setting
 - 3.2.3 Refer to Appendix 30: Sample Signage for Droplet Precautions. Refer to Appendix 21: Recommendations for Putting on and Taking off Personal Protective Equipment.
- 3.3 Client Placement
 - 3.3.1 In a clinic setting, where possible, triage client away from waiting area to an examination room or cubicle as soon as possible
 - 3.3.2 Where possible, draw privacy curtain
 - 3.3.3 If this is not possible, maintain a two-meter spatial separation (Refer to Policy 3.2: Risk Assessment Including Acute Respiratory Infections).
- 3.4 Chart Identification
 - 3.4.1 Flag the client's chart appropriately indicating droplet precautions required
- 3.5 PPE (Gloves, Gown, Face Protection)
 - 3.5.1 Client should be asked to wear a procedure (surgical) mask and to perform hand hygiene
 - 3.5.2 A mask and eye protection must be worn by any individual who is within two metres of the client, which includes:
 - 3.5.3 Surgical / procedure style mask covering mouth and nose
 - 3.5.4 Eye protection integrated with mask as visor, or separate items such as: goggles, face shield, or face mask
- 3.6 Cleaning of Equipment
 - 3.6.1 Clean and disinfect shared equipment between clients (e.g. chair, door knobs, examination table, stethoscope, blood pressure cuff after each use)

- 3.6.2 Keep infrequently used items in the treatment/care rooms covered with a cleanable cover (Refer to Section 7.0: Principles of Cleaning and Disinfecting Environmental Surfaces)
- 3.6.3 Keep supplies in treatment/care rooms to a minimum to prevent possible contamination and the need for disposal or additional cleaning and disinfection

3.7 Environmental Cleaning

3.7.1 Routine cleaning (Refer to Section 7.0: Principles of Cleaning and Disinfecting Environmental Surfaces)

3.8 Transport

- 3.8.1 Client to wear a mask during transport if tolerated
- 3.8.2 If the client cannot tolerate wearing a mask, transport staff should wear a mask and eye protection

3.9 Communication

3.9.1 Effective communication regarding precautions must be given to client, client's families, and to other facilities and transport services prior to transfer

3.10 Visitors

- 3.10.1 Should receive education regarding hand hygiene
- 3.10.2 Mask should be worn by visitors when within 2 metres of the client

Table 1: Summary Table of Elements That Comprise Droplet Precautions

Element	Ambulatory/Clinic Setting	Home Health Care
Accommodation	Door may be open Triage client away from waiting area to a single room as soon as possible (if available), or draw privacy curtain (if available) and maintain a two-metre spatial separation Client to wear a mask for duration of visit and perform hand hygiene	Discuss feasibility of spatial separation with client (e.g. when sleeping)
Signage	Sign on door if staying for longer duration	Not applicable

Equipment and items in the environment	Dedicate if possible
Environmental Cleaning	Routine cleaning
Transport	Client to wear a mask during transport
Communication	Effective precautions must be communicated to client families, other facilities and transport services prior to transfer

Source: Adapted from PIDAC: Routine Practices and Additional Precautions in All Health Care Settings, November 2012. Page 37.

For other conditions and etiologies requiring Droplet Precautions, refer to Appendix 31: Conditions/Clinical Presentations and Etiologies Requiring Droplet Precautions.

4 APPENDICES

Appendix 12: Public Health Ontario. (2012). PIDAC's Routine Practices Fact Sheet for all Health Care Settings.

Appendix 21: Public Health Ontario. (2012). PIDAC's Recommended Steps for Putting on and Taking off Personal Protective Equipment.

Appendix 30: Public Health Ontario. (2012). PIDAC's Sample Signage for Entrance to Room of a Patient Requiring Airborne Precautions in all Health Care Settings.

Appendix 31: Public Health Agency of Canada. (2013). Conditions/Clinical Presentations and Etiologies Requiring Droplet Precautions.

5 REFERENCES

Bennett, G. (2009). Infection Prevention Manual for Ambulatory Care. Washington, D.C. Association for Professionals in Infection Control and Epidemiology.

Friedman, C. & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Agency of Canada. (2013). Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in All Health Care Settings. 2nd Edition. Retrieved from: http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Public Health Ontario. (2012). Routine Practices and Additional Precautions in All Health Care Settings. 3rd Edition. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP All HealthCare Settings Eng2012.pdf

Section 4: Additional Precaution Policy number: 4.4

Subject: **Droplet and Contact** Issued: **September 2015**

Precautions

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 Droplet <u>and</u> contact precautions are used in addition to Routine Practices for clients known or suspected of having an infection that can be transmitted or spread in more than one way or if the cause of illness is unknown. These precautions are the most common combination.

2 POLICY

2.1 Staff must use Droplet and Contact Precautions in addition to Routine Practices for clients known or suspected of having an infection that can be spread in more than one way. These pathogens can be transmitted by droplet directly toward the HCP and/or by direct patient contact, or by contact with items in the client's environment, Personal Protective Equipment (PPE) required to enter a room includes a mask with visor, or mask and goggles, and wearing gown and gloves. The ill client will be encouraged to wear a half face mask to contain respiratory droplets, and then be asked to perform hand hygiene.

3 PROCEDURE

- 3.1 Droplet and Contact Precautions:
 - 3.1.1 Refer to Appendix 33 for procedures to be followed while donning and doffing of PPE which include hand hygiene, applying gown, mask, eye protection, and gloves
 - 3.1.2 Change gloves when changing tasks while working with the same client
 - 3.1.3 Any items being removed from the area need to be cleaned and disinfected.
- 3.2 Droplet and Contact Transmission:
 - 3.2.1 Microorganisms contained in the droplets are deposited on surfaces in the client's immediate environment
 - 3.2.2 Some of the deposited microorganisms may remain viable for extended periods of time
 - 3.2.3 Contact transmission can occur by touching surfaces and objects contaminated with respiratory droplets. (Refer to Policy 4.2: Contact Precautions; and Policy 4.3: Droplet Precautions)

- 3.2.4 Microorganisms requiring Droplet and Contact Precautions include but are not limited to ARIs including pneumonia, common cold, influenza, RSV, and all viral respiratory illnesses (Refer to Appendices 32 and 33: Fact Sheets: Influenza, Common Cold)
- 3.2.5 Refer to Appendix 34: Sample Signage for Droplet and Contact Precautions

4 APPENDICES

Appendix 21: Public Health Ontario. (2012). PIDAC's Recommended Steps for Putting On and Taking Off Personal Protective Equipment.

Appendix 32: Public Health Ontario. (2011). Influenza Fact Sheet.

Appendix 33: Public Health Ontario. (2011). Common Cold Fact Sheet.

Appendix 34: Public Health Ontario. (2012). PIDAC's Sample Signage for Entrance to a Room of a Patient Requiring Droplet and Contact Precautions in all Health Care Settings.

5 REFERENCES

Bennett, G. (2009). Infection Prevention Manual for Ambulatory Care. Washington, D.C.: Association for Professionals in Infection Control and Epidemiology.

Friedman, C. & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Agency of Canada. (2013). Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html

Public Health Ontario – Regional Infection Control Networks. (2012). Environmental Cleaning Toolkit. Retrieved from

http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental_Cleaning_Toolkit.aspx

Public Health Ontario. (2011). Routine Practices and Additional Precautions in all Health Care Settings. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP All HealthCare Settings Eng2012.pdf

Public Health Ontario. (2011). Infection Prevention and Control Reference Tool Fact Sheets for health care providers in the community.

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Section 4: Additional Precaution Policy number: 4.5

Subject: Additional Precautions: Issued: September 2015

Airborne Precautions

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 Airborne Precautions are used in addition to Routine Practices for clients known or suspected of having an illness transmitted by the airborne route. Airborne transmission occurs when airborne particles remain suspended in the air, travel on air currents and are inhaled by others who are nearby or who may be some distance away from the source client, in a different room, or in the same room that a client has left, if there have been insufficient air exchanges. Control of airborne transmission requires control of air flow through special ventilation systems and the use of respirators. Microorganisms transmitted by the airborne route are *Mycobacterium tuberculosis* (TB), varicella virus (chickenpox virus and disseminated shingles) and measles virus.

2 POLICY

- 2.1 Staff must use Airborne Precautions in addition to Routine Practices for clients known or suspected to have an infection that can be transmitted by small particles suspended in the air and inhaled by others. Staff must maintain a high degree of suspicion for those who present with compatible symptoms of an airborne infection.
- 2.2 Personal Protective equipment (PPE) for airborne precautions requires the use of an N95 fit tested respirator and eye protection for contact with the client. Dependent on the risks, and in accordance with risk assessment for Routine Practices, other PPE may be required. Engineering controls such as negative pressure accommodation is required for long term accommodation of someone requiring airborne precautions.

3 PROCEDURE

3.1 Airborne Transmission

- 3.1.1 Occurs when small particles carrying an infectious agent exit the respiratory tract of a person and are inhaled by others
- 3.1.2 Particles can be generated when client talks, coughs, sneezes, sings etc.
- 3.1.3 Particles can be generated through some procedures performed on the respiratory tract to a person with undiagnosed tuberculosis (TB) such as bronchoscopy or sputum induction

- 3.1.4 Refer to Appendix 39: Conditions/Clinical Presentations and Specific Etiologies Requiring Airborne Precautions. Other microorganisms transmitted by the airborne route are referred to in Appendix 36: Tuberculosis Fact Sheet; Appendix 37: Chickenpox Fact Sheet.
- 3.1.5 Refer to FNIHB-OR Respiratory Protection Plan for further information.
- 3.2 NOTE: Influenza Pandemic
 - 3.2.1 The Ontario Health Plan for an Influenza Pandemic (2013) indicates: Although N95 respirators are not routinely required for seasonal influenza, in keeping with the precautionary principle, they may be recommended for use during an influenza pandemic and for aerosol-generating procedures (see below).
- 3.3 Aerosol Generating Medical Procedures
 - 3.3.1 The following diseases may also be transmitted from human to human by the airborne route during aerosol-generating medical procedures (e.g. intubation, open airway suction, cardio-pulmonary resuscitation, bronchoscopy);
 - 3.3.1.1 Emerging respiratory infections
 - 3.3.2 Any piece of equipment used in the oral cavity (because of the presence of saliva and/or blood and/or debris) powered by compressed air, such as hand pieces, cavitron, prophy jet, air water syringe, will cause droplets/aerosol. Clinician and chairside assistant require protection.
- 3.4 Controls for Preventing the Transmission of Airborne Infections
 - 3.4.1 Immunity against measles and varicella for HCP and all staff
 - 3.4.2 Early identification of potential cases
 - 3.4.3 Prompt referral to a facility with an airborne infection isolation room
 - 3.4.4 Appropriate treatment of client where applicable
 - 3.4.5 The use of a fit-tested, seal-checked N95 respirator, when indicated
 - 3.4.6 Identification and follow-up of exposed clients and staff (Refer to Policy 1.4: Management of Occupational Accidental Exposure to Infectious Diseases)
- 3.5 Airborne Precautions in a Health Facility (in addition to Routine Practices):

Refer to Appendix 35: Sample Signage for Airborne Precautions Refer to Appendix 21: Recommended Steps for Putting On and Taking Off Personal Protective Equipment

3.5.1 Client Placement

3.5.1.1 In a clinic setting, triage client away from waiting area to an examination room with door closed and examine and transfer/discharge as soon as possible to a setting with an airborne isolation room (if available)

3.5.2 Chart Identification

- 3.5.2.1 Flag the client's chart appropriately indicating precautions required
- 3.5.3 Personal Protection Equipment (Refer to Appendix 38: Masks or N95 Respirators)
 - 3.5.3.1 A fit-tested and seal-checked N95 respirator must be worn when entering the room, transporting or caring for a client with signs and symptoms or a diagnosis of an airborne infection. (Refer to FNIHB-OR Respiratory Protection Program)
 - 3.5.3.2 Client should be asked to wear a procedure (surgical) mask which is effective in trapping the large infectious particles expelled by a coughing client. Client should never wear an N95 mask.
 - 3.5.3.3 For measles and varicella, only immune staff should enter the room of the client. An N95 respirator is not required for staff known to be immune to measles and varicella.
 - 3.5.3.4 An N95 respirator must be worn if non-immune staff are required to enter the room of a client with measles or varicella when there are no qualified immune staff available and client safety would be compromised if they did not provide care.
 - 3.5.3.5 **Appropriate Use of N95 Respirators:** (Refer to FNIHB-OR Respiratory Protection Program for additional information)
 - 3.5.3.5.1 Select respirator for which you have been fit-tested.
 - 3.5.3.5.2 **NOTE**: Staff should carry a card in their wallet (or another safe and readily available place) identifying when they were fit-tested and the name and model of the N95 respirator they have been fit-tested for
 - 3.5.3.5.3 Perform a seal-check each time a respirator is applied
 - 3.5.3.5.4 Change respirator if wet or soiled, or more resistance to breathing is apparent for the user
 - 3.5.3.5.5 Remove the respirator correctly and discard on removal into an appropriate receptacle. (Refer to Appendix 21: Recommended Steps for Putting On and Taking Off Personal Protective Equipment)
 - 3.5.3.5.6 Perform hand hygiene after removing the respirator
 - 3.5.3.5.7 Never put an N95 respirator on a client.

3.5.4 Cleaning of Equipment

- 3.5.4.1 As per Routine Practices (Refer to Appendix 12: PIDAC's Routine Practices Fact Sheet for All Health Care Settings)
- 3.5.4.2 Clean and disinfect equipment between uses

3.5.5 Environmental Cleaning

3.5.5.1 Routine cleaning (Refer to Section 7.0: Principles of Cleaning and Disinfecting Environmental Surfaces)

3.5.6 Communication

3.5.6.1 Effective communication regarding precautions must be given to clients, families, other departments, other facilities and transport services prior to transfer

3.5.7 Visitors For TB:

- 3.5.7.1 Household contacts should be assessed for active tuberculosis
- 3.5.7.2 A respirator is not required by household contacts as they have already been exposed in the household

3.5.8 For varicella and measles:

- 3.5.8.1 Household contacts of clients with measles or varicella are not required to wear an N95 respirator when visiting, as they will already have been exposed in the household
- 3.5.8.2 They should be assessed for active infection, and immunization status prior to visiting
- 3.5.8.3 Visitors of clients with measles or varicella who are known to be immune do not need to wear an N95 respirator to visit
- 3.5.8.4 Non-household contacts that are not immune should not visit.

NOTE: If both tuberculosis and a respiratory virus are suspected in a single individual, a combination of Airborne, Droplet and Contact precautions should be used. Do not reuse the N95 respirator; it must be discarded after each use.

Table 1: Summary Table of Elements That Comprise Airborne Precautions

Element	Ambulatory/Clinic Setting	Home Health Care
Accommodation	Airborne infection isolation room if available or alternate arrangements if necessary	Not applicable

Signage	Sign on door if staying for longer duration	Not applicable
N95 Respirator TB	For duration of visit	For entry to client's home
Measles, Varicella	Only immune staff to enter room. N95 respirator is not required if immune.	
Equipment and items in the environment	As per Routine Practices	
Environmental Cleaning	Routine cleaning	Routine household cleaning
Transport	Client to wear a procedure mask during transport Transport staff to wear an N95 respirator during transport	Not applicable
Communication	Effective precautions must be communicated to client families, other facilities and transport services prior to transfer	

Source: Adapted from PIDAC: Routine Practices and Additional Precautions in All Health Care Settings, November 2012. Page 41.

4 APPENDICES

Appendix 12: Public Health Ontario. (2012). PIDAC's Routine Practices Fact Sheet for all Health Care Settings.

Appendix 35: Public Health Ontario. (2012). PIDAC's Sample Signage for Entrance to Room of a Patient Requiring Airborne Precautions in all Health Care Settings.

Appendix 21: Public Health Ontario. (2012). PIDAC's Recommended Steps for Putting On and Taking Off Personal Protective Equipment.

Appendix 36: Public Health Ontario. (2011). Chickenpox Fact Sheet – Infection Prevention and Control Reference Tool.

Appendix 37: Public Health Ontario. (2011). Tuberculosis Fact Sheet – Infection Prevention and Control Reference Tool for Health Care Providers in the Community.

Appendix 38: Public Health Agency. (2013). Mask or N95 Respirator

Appendix 39: Public Health Agency of Canada. (2013). Conditions/Clinical Presentations and Specific Etiologies Requiring Airborne Precautions

5 REFERENCES

Bennett, G. (2009). Infection Prevention Manual for Ambulatory Care. Washington, D.C.: Association for Professionals in Infection Control and Epidemiology.

Friedman, C. & Petersen, K. H. (2004). Infection Control in Ambulatory Care. Sudbury, A: Jones and Bartlett Publishers.

Health Canada – First Nations and Inuit Health Branch (FNIHB) Ontario Region. (2012). Respiratory Protection Program. pages 2-3. Retrieved from https://www2.onehealth.ca

Public Health Agency of Canada. (2013). Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings. Retrieved from: http://www.ipac-canada.org/pdf/2013_PHAC_RPAP-EN.pdf

Public Health Ontario – Regional Infection Control Networks. (2013). Environmental Cleaning Toolkit. Retrieved from

http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental_Cleaning_Toolkit.aspx

Public Health Ontario. (2011). Infection prevention and control reference tool fact sheets for health care providers in the community.

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best_Practices_Environmental_Cleaning_2012.pdf

Public Health Ontario. (2012). Routine Practices and Additional Precautions in all Health Care Settings. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP All HealthCare Settings Eng2012.pdf





Section 5: Antibiotic Resistant

Organisms

Policy number: **5.1**

Issued: **September 2015**

Subject: Methicillin-Resistant Staphylococcus aureus (MRSA)

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 Antibiotic resistance is a serious threat to the treatment of infectious diseases. With the rise in Methicillin-Resistant *Staphylococcus aureus* (MRSA) and Community Associated MRSA (CAMRSA), has come the need for measures to prevent and control the spread of these microorganisms. Since the usual method of acquisition of MRSA and CA-MRSA, is via direct or indirect contact, it is possible to prevent these infections by instituting a set of practices and procedures that will prevent transmission of MRSA and CA-MRSA to clients. Such prevention and control efforts are necessary to protect the health and improve outcomes for clients but also to lessen the burden of MRSA and CA-MRSA on health care systems.

2 POLICY

2.1 In the community and home care settings, routine practices must be practiced with all clients at all times regardless of whether a client is known to have an Antibiotic Resistant Organism (ARO). If a client is known to be colonized with MRSA, or a client residing within the community is known to have CA-MRSA, all staff must implement Contact Precautions in addition to routine practices for all direct client care. (See Glossary for definition of Direct Care).

3 PROCEDURE

- 3.1 What is MRSA?
 - 3.1.1 *Staphylococcus aureus* is a bacterium that periodically lives on the skin and mucous membranes of healthy people without causing illness (i.e. colonization)
 - 3.1.2 Occasionally *S. aureus* can cause an infection
 - 3.1.3 When *S. aureus* develops resistance to the beta-lactam class of antibiotics (e.g. cloxicillin) it is called methicillin-resistant *Staphylococcus aureus* (MRSA)
 - 3.1.4 MRSA may be either health care-associated or community associated (CA-MRSA)
- 3.2 Types of MRSA
 - 3.2.1 Hospital-Associated MRSA (HA-MRSA)

- 3.2.2 Hospital acquired MRSA strains circulate and are transmitted to individuals within health care facilities
- 3.2.3 Community-Associated MRSA (CA-MRSA)
- 3.2.4 Strains linked to colonization and transmission in the community
- 3.2.5 Usually found in individuals who develop infections in the community and who have not had recent exposure to the health care system (Refer to FNIHB-OR CA-MRSA Tool Kit for Health Care Providers)

3.3 Risk Factors for MRSA

- 3.3.1 Increased risk for acquiring Antibiotic-Resistant Organisms (AROs) such as MRSA is related to both the individual client's own host risk factors as well as to the amount of time that is spent in a setting where they are exposed to these microorganisms. Both of these factors must be taken into consideration in order to assess an individual's acquisition risk.
- 3.3.2 Risk factors for HA-MRSA include:
 - 3.3.2.1 Previous colonization or infection with MRSA
 - 3.3.2.2 Greater than 12 hours in any health care facility in the past 12 months
 - 3.3.2.3 Recent exposure to unit/area of a health care facility having an MRSA outbreak
 - 3.3.2.4 Health care in another country in the past 12 months
 - 3.3.2.5 Stay in an intensive care, transplant, or burn unit
 - 3.3.2.6 Increased age
 - 3.3.2.7 Extended stay in an acute care facility
 - 3.3.2.8 Previous or recurrent hospitalizations
 - 3.3.2.9 Invasive procedures
 - 3.3.2.10 Presence of invasive indwelling devices
 - 3.3.2.11 Recent antibiotic use
 - 3.3.2.12 Presence of a surgical wound, decubitus ulcer or other chronic wound
 - 3.3.2.13 Contact with or proximity to a client colonized or infecting with MRSA who had draining skin lesions or wounds not covered by dressings or copious uncontrolled respiratory secretions
 - 3.3.2.14 Malnutrition, immunosuppression (age, medication or condition–related i.e. HIV)
 - 3.3.2.15 Debilitated and/or bed bound and requiring extensive hands on care

3.3.3 Risk Factors for CA-MRSA

- 3.3.3.1 Children, especially under 2 years
- 3.3.3.2 Aboriginal people and African-Americans
- 3.3.3.3 Classroom contacts of MRSA case
- 3.3.3.4 Athletes, particularly in contact sports
- 3.3.3.5 Persons living in congregate or crowded settings (military personnel, inmates in correctional facilities
- 3.3.3.6 Persons exposed to colonized pets, including veterinary workers
- 3.3.3.7 Men who have sex with men
- 3.3.3.8 Injection drug users
- 3.3.3.9 Persons with past MRSA infection or MRSA carriage
- 3.3.3.10 Persons with chronic skin disorders
- 3.3.3.11 Persons of lower socioeconomic status
- 3.3.3.12 Recurrent or recent antibiotic treatment
- 3.3.3.13 Recurrent or abscesses/household clusters of abscesses

3.4 MRSA Transmission

- 3.4.1 Spread occurs through direct contact between an infected person and an uninfected person, or by indirect contact through touching contaminated objects or surfaces that are part of the infected person's environment
- 3.4.2 Most commonly spread via the transiently colonized hands of health care workers who acquire it from contact with colonized or infected clients, or after handling contaminated material or equipment
- 3.4.3 Hand hygiene and environmental surface cleaning are important measures to prevent transmission
- 3.4.4 There is evidence that some individuals may act as "*super-shedders*" of MRSA when coinfected with a respiratory virus and that they can spread MRSA via respiratory droplets (the "*cloud*" phenomenon)
- 3.4.5 Spread within the community may be increased when the following risk factors are present:
 - 3.4.5.1 Crowded conditions
 - 3.4.5.2 Close contact

- 3.4.5.3 Lack of cleanliness
- 3.4.5.4 Sharing common personal items
- 3.4.5.5 Having compromised or broken skin
- 3.4.6 Staff Acquisition of MRSA
 - 3.4.6.1 Risk is low and is significantly reduced if staff follow Routine Practices, perform hand hygiene and wear PPE appropriately according to the "risk assessment".
 - 3.4.6.2 Most experts believe that with adequate adherence to hand hygiene and Routine Practices, there is no risk of staff acquisition of MRSA.
- 3.4.7 Prevention of MRSA Transmission
 - 3.4.7.1 Contact precautions in addition to Routine Practices should be used in the management of CA-MRSA. (Refer to Policy 4.2: Contact Precautions; Refer to Appendix 12: PIDAC Routine Practices Fact Sheet; Appendix 24: PIDAC Contact Precautions Fact Sheet; Appendix 5: 4 Moments for Hand Hygiene; Appendix 25: CA-MRSA Fact Sheet; Appendix 21: Recommended Steps for Putting On and Taking Off Personal Protective Equipment and Appendix 41: Management of AROs in Various Health Care Settings.)
 - 3.4.7.2 Requires consistent application and reinforcement of good hygienic practices and judicious use of antibiotics.
 - 3.4.7.3 If skin lesions are present instruct the patient to:
 - 3.4.7.3.1 Cover lesions to contain drainage or exudates
 - 3.4.7.3.2 Not share personal products that are in contact with the skin (e.g. deodorant, razors, toothbrushes, towels, nail files, combs and brushes)
 - 3.4.7.3.3 Not share unwashed towels
 - 3.4.7.3.4 Discard contaminated waste, including used dressings, in a safe and timely manner (e.g. into a garbage pail lined with a plastic bag, so the bag can be removed and tied without re-contaminating hands)
 - 3.4.7.3.5 Wash hands with soap and water or use alcohol-based hand rub after touching any skin lesions and potentially infected materials, such as soiled dressings as per the 4 Moments for Hand Hygiene (Refer to Appendix 5: 4 Moments for Hand Hygiene)
 - 3.4.7.3.6 Refer to Appendix 40: Frequently Asked Questions for Patients and Caregivers Handout; Appendix 41: Management of AROs in Various Health Care Settings

3.5 Environmental Cleaning

- 3.5.1 After the patient leaves the examining room, immediately wipe all surfaces and patient care equipment (blood pressure cuff, stethoscope, etc.) that have been in contact with the patient, with an approved hospital grade disinfectant such as a hydrogen peroxide solution or wipe (e.g. ACCEL Prevention)
- 3.5.2 Attention to good environmental cleaning is one of the most important measures to prevent the transmission of MRSA. (Refer to Section 7.0: Principles of Cleaning and Disinfecting Environmental Surfaces)
- 3.6 Screening and Decolonization:
 - 3.6.1 Routine screening for colonization of nares or other sites is NOT recommended
 - 3.6.2 Decolonization should be considered only in exceptional circumstances, such as recurrent infections and transmission within a family. This should be done in consultation with an infectious disease specialist.
- 3.7 Treatment and Clinical Guidance:
 - 3.7.1 Refer to FNIHB-OR CA-MRSA Tool Kit for Health Care Providers for individual interventions and clinical guidance information which can be accessed on One Health. (www2.onehealth.ca/)

4 APPENDICES

Appendix 5 Public Health Ontario. 4 Moments for Hand Hygiene

Appendix 12: Public Health Ontario. (2012). PIDAC's Routine Practices Fact Sheet for all Health Care Settings

Appendix 21: Public Health Ontario. (2012). PIDAC's Recommended Steps for Putting On and Taking Off Personal Protective Equipment.

Appendix 24: Public Health Ontario. (2012). PIDAC's Sample Signage for Entrance to Room of a Patient Requiring Contact Precautions in all Health Care Settings.

Appendix 25: FNIHB-OR. CA-MRSA in the Community Fact Sheet

Appendix 40: ARO Handout: Frequently Asked Questions for Patients and Caregivers

Appendix 41: Management of AROs in Various Health Care Settings

5 REFERENCES

Friedman, C., Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Barlett Publishers

Health Canada. (2012). Community-Associated MRSA for Health Care Providers. Retrieved from: https://www2.onehealth.ca

Public Health Ontario. (2013). Annex A –Screening, Testing and Surveillance for Antibiotic -Resistant Organisms (AROs). Annexed to: Routine Practices and Additional Precautions in All Health Care Settings. Retrieved from: http://www.publichealthontario.ca/en/eRepository/PIDAC-IPC Annex A Screening Testing Surveillance AROs 2013.pdf

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Public Health Ontario. (2012). Routine Practices and Additional Precautions in All Health Care Settings. 3rd Edition. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP_All_HealthCare_Settings_Eng2012.pdf

Public Health Ontario. (2011). Just Clean your Hands: Your 4 Moments of Hand Hygiene. Retrieved from http://www.publichealthontario.ca/en/eRepository/4-moments-for-hand-hygiene-poster.pdf

St.Joseph's Healthcare Hamilton. (2011). Infection Prevention and Control: Guidelines during Construction, Renovation and Maintenance in Healthcare Facilities. Retrieved from: <a href="http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CB0QFjAAahUKEwit_JGurYPHAhWBth4KHZ5XAS8&url=http%3A%2F%2Fwww.stjoes.ca%2Fabout%2Fprocurement-vendor-relations%2F079-med.pdf&ei=cFu6Va2EK4Htep6vhfgC&usg=AFQjCNEsMziEm1-DaCRX28MlEBrtwpNrIA&bvm=bv.99028883,d.dmo

Writing Group of the Expert Panel of Canadian Infectious Disease, Infection Prevention and Control, and Public Health Specialists. (2006). Guidelines for the Prevention and Management of Community-Associated Methicillin-Resistant *Staphylococcus Aureus* (CA-MRSA): A Perspective for Canadian Healthcare Practitioners. Retrieved from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3555463/

SECTION 6: SPECIMEN COLLECTION, STORAGE AND TRANSPORTATION ANTIBIOTIC RESISTANT ORGANISMS

Section 6: Specimen Collection,

Storage and Transportation Antibiotic Resistant Organisms

Subject: Collection and Transportation

of Laboratory Specimens

Distribution: All FNIHB Staff

Policy number: 6.1

Issued: September 2015

Revised:

1 PURPOSE

1.1 Proper sample collection of laboratory specimens, as well as their handling and transport, are key factors in obtaining a valid and timely laboratory test result and ultimately in delivering quality client care. Specimens must be obtained using proper technique, collected in the proper container, correctly labeled (in the presence of the client), accompanied by the correct lab requisition, packaged, and promptly transported to the laboratory in compliance with the Transportation of Dangerous Goods Regulations. All specimens should be handled with routine practices as if they are hazardous and infectious.

2 POLICY

- 2.1 All staff authorized to obtain laboratory samples within the scope of their practice, must follow Public Health Ontario's guidelines regarding specimen collection, handling and transportation. If private labs are used, staff must follow their requirements as identified by the specific laboratory.
- 2.2 All staff must collect specimen, handle, classify, label, complete requisition, package and transport laboratory specimens in accordance with the Transportation of Dangerous Goods Regulations. All specimens must be handled with routine practices as if they are hazardous and infectious.

3 PROCEDURE

- 3.1 Refer to the most current version of the Public Health Ontario guidelines regarding specimen collection, handling and transportation or to the specific guidelines of the private lab being utilized in the respective Zone.
- 3.2 The most current information from Public Health Ontario regarding specimen collection, handling and transportation is available at http://www.publichealthontario.ca/en/ServicesAndTools/LaboratoryServices/Pages/Specimen-Collection.aspx
- 3.3 The most current version of the Transportation of Dangerous Goods is available at http://www.tc.gc.ca/eng/tdg/clear-download-372.htm

4 REFERENCES

Department of Justice Canada. (2015). Transportation of Dangerous Goods Regulations. Retrieved from: https://www.tc.gc.ca/eng/tdg/clear-tofc-211.htm

Public Health Ontario. (2012). Laboratory Materials: Specimen Collection Guide. Retrieved from: http://www.publichealthontario.ca/en/ServicesAndTools/LaboratoryServices/Pages/Specimen-Collection.aspx

Public Health Ontario. (2012). Routine Practices and Additional Precautions in all Health Care Settings. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP All HealthCare Settings Eng2012.pdf

SECTION 7: PRINCIPLES OF CLEANING AND DISINFECTING ENVIRONMENTAL SURFACES

Policy number: 7.1

Issued: **September 2015**

Section 7: Principles of Cleaning and

Disinfecting Environmental Surfaces

Subject: Environmental Cleaning:

Overview Revised:

Distribution: All FNIHB Staff

1 PURPOSE

- 1.1 High-touch environmental surfaces of the health care setting hold a greater risk of becoming contaminated with infectious agents than do public areas of non-health care organizations. Health care settings are complex environments due to the nature of activities and assessments performed, and the activities, interactions and behaviors of health care providers (HCP), clients and visitors within the health care setting. This increases the likelihood of direct and indirect contact with infectious agents and contaminated surfaces, many of which may constitute a risk to HCP, clients, and visitors in the environment.
- 1.2 Transmission of infectious agents in the environment requires the following triad:
 - 1.2.1 Presence of an **infectious agent**: e.g. bacteria, virus or germ from a HCP, client or visitor on equipment, objects and surfaces in the health care environment
 - 1.2.2 **Environment:** a means for the infectious agent to transfer from client-to-client, staff-to-client, client-to-staff, or staff-to-staff, or soiled equipment to staff or client
 - 1.2.3 **Host:** susceptible clients, health care providers and visitors
- 1.3 In the health care setting, the role of environmental cleaning is important because it reduces the number and amount of infectious agents that may be present and may also eliminate routes of transfer of infectious agents from one person/object to another, thereby reducing the risk of infection. The goal of cleaning is to keep the environment safe for clients, health care providers, and visitors.

2 POLICY

- 2.1 All health care providers working in FNIHB-OR Community Health Centres and nursing stations must adhere to the general principles of environmental cleaning in their day- to-day activities.
- 2.2 FNIHB-OR staff must adhere to the specific information and standard operating procedures outlined in the *FNIHB-OR Environmental Cleaning Procedure Manual*.

3 PROCEDURE

- 3.1 The following items are general principles of environmental cleaning that must be practiced within all health care centres and/or nursing stations. Each item is presented in more detail in an individual policy and procedure that follows within this section.
- 3.2 **Levels of Clean**: Health care facilities can be categorized into two levels for the purpose of environmental cleaning.
 - 3.2.1 **Hotel Clean**: area of the facility that is **not** involved in client care
 - 3.2.2 **Hospital Clean**: area of the facility that is involved in client care
- 3.3 **Frequency of Cleaning**: Frequency of cleaning of an object or surface depends on:
 - 3.3.1 Whether the surface is high-touch or low-touch
 - 3.3.2 Type of activity taking place in the area
 - 3.3.3 Vulnerability of HCP and clients in the area
 - 3.3.4 Probability of contamination
- 3.4 **Selection of Finishes and Surfaces**: All surfaces and finishes in the health care setting must reflect basic infection prevention and control (IPAC) principles such as:
 - 3.4.1 Ease of maintenance and repair
 - 3.4.2 Cleanable with hospital-grade disinfectants
 - 3.4.3 Smooth, seamless, nonporous and unable to support microbial viability
- 3.5 **Cleaning Agents and Disinfectants**: Cleaning and disinfecting agents used by each facility must meet specific requirements such as:
 - 3.5.1 Have a drug identification number (DIN) from Health Canada
 - 3.5.2 Be compatible with items to be cleaned and disinfected
 - 3.5.3 Used according to the manufacturers' recommendations
- 3.6 **New Equipment/Product Purchases:** All new equipment purchased for the health care facility must meet IPAC requirements for cleaning and disinfection.
 - 3.6.1 Equipment that is used to clean and disinfect must also meet these standards

4 REFERENCES

Public Health Ontario. (2010). Infection Prevention and Control Resource Manual for Residential Hospice Settings. Retrieved from http://www.ontla.on.ca/library/repository/mon/25001/307210.pdf

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in All Health Care Settings. 2nd Edition. Retrieved from: http://www.publichealthontario.ca/en/eRepository/Best_Practices_Environmental_Cleaning_2012.pdf

Section 7: **Principles of Cleaning and Disinfecting Environmental Surfaces**

Policy number: 7.2

Distincting Environmental 5

Issued: **September 2015**

Subject: Levels of Clean

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

- 1.1 Health care facilities may be categorized into two components for the purposes of environmental cleaning:
 - 1.1.1 *Hotel component* is the area of the facility that is not involved in client care; this includes public areas such as lobbies and waiting rooms; offices; corridors; stairwells; and service areas. Areas designated in the hotel component are cleaned with a *Hotel Clean* regimen.
 - 1.1.2 *Hospital component* is the areas of the facility that is involved in client care; this includes procedure rooms; bathrooms; clinic rooms; clean and sterile equipment and supplies storage rooms; and diagnostic and treatment areas. Areas designated in the hospital component are cleaned with a *Hospital Clean* regimen.
- 1.2 Provision of a *Hospital Clean* care environment is important for both client safety and staff safety. Environmental cleaning of these two component areas must be categorized and resourced differently in terms of cleaning priority, intensity, frequency and manpower. From a client safety and staff safety perspective, Hospital Clean is the most important cleaning and resource priorities should be centred here

2 POLICY

- 2.1 All staff working in FNIHB-OR Community Health Centres and nursing stations must understand the differences between Hotel Clean and Hospital Clean and must follow the respective cleaning practices dictated by the area of care and subsequent level of clean.
- 2.2 FNIHB-OR personnel must adhere to the specific information and standard operating procedures as outlined in the *FNIHB-OR Environmental Cleaning Procedure Manual*.

3 **PROCEDURE**

- 3.1 Level of Clean:
 - 3.1.1 Hotel Clean:
 - 3.1.1.1 Measure of cleanliness based on visual appearance that includes dust and dirt removal, waste disposal and cleaning of windows and surfaces

- 3.1.1.2 Basic cleaning that takes place in areas of the health facility that are **not** involved in client care
- 3.1.1.3 Includes public areas such as:
 - 3.1.1.3.1 Lobbies and waiting rooms
 - 3.1.1.3.2 Offices
 - 3.1.1.3.3 Corridors
 - 3.1.1.3.4 Stairwells
 - 3.1.1.3.5 service areas
- 3.1.2 Hospital Clean:
 - 3.1.2.1 Measure of cleanliness routinely maintained in care areas of the health facility
 - 3.1.2.2 Includes areas such as:
 - 3.1.2.2.1 Bathrooms
 - 3.1.2.2.2 Vlinic rooms
 - 3.1.2.2.3 Diagnostic and treatment areas
 - 3.1.2.2.4 Equipment reprocessing (sterilization) areas
 - 3.1.2.2.5 Sterile supplies storage and clean utility rooms
 - 3.1.2.3 "Hospital clean" is "Hotel Clean" with the addition of:
 - 3.1.2.3.1 Disinfection, increased frequency of cleaning, auditing and other infection control measures in client care areas

3.2 Components of Hotel Clean and Hospital Clean

Components of Hotel Clean	Components of Hospital Clean
Floors and baseboards are free of stain, visible	Floors and baseboards are free of stain, visible
dust, spills, streaks, mouse droppings and flies	dust, spills, streaks, mouse droppings and flies
Walls, ceilings and doors are free of visible	Walls, ceilings and doors are free of visible
dust, gross soil, streaks, spider webs and	dust, gross soil, streaks, spider webs and
handprints	handprints
All horizontal surfaces are free of visible dust	All horizontal surfaces are free of visible dust
or streaks, mouse droppings and flies (includes	or streaks, mouse droppings and flies (includes
furniture, window ledges, overhead lights,	furniture, window ledges, overhead lights,
phones, picture frames, carpets etc.)	phones, picture frames, carpets etc.)
Mirrors and windows are free of dust and	Mirrors and windows are free of dust and
streaks	streaks

Soap, alcohol and paper towel dispensers are free of dust, soiling and residue and replaced/replenished when empty	Soap, alcohol and paper towel, masks, and glove dispensers are free of dust, soiling and residue and replaced/replenished when empty
Appliances are free of dust, soiling and stains	Appliances are free of dust, soiling and stains
Waste is disposed of appropriately	Waste is disposed of appropriately
Items that are broken, torn, cracked or malfunctioning are replaced	Items that are broken, torn, cracked or malfunctioning are replaced
	PLUS
Bathroom fixtures including toilets, sinks, tubs and showers are free of streaks, soil, stains and soap scum	Bathroom fixtures including toilets, sinks, tubs and showers are free of streaks, soil, stains and soap scum
	High-touch surfaces in client care areas are cleaned and disinfected with a hospital-grade cleaner (e.g. stretcher, wheelchair arms and handles, grab rails, door knobs)
	Non-critical medical equipment is cleaned and disinfected between clients (e.g. stethoscopes)
	Cleaning practices are periodically monitored and audited with feedback and education

4 **REFERENCES**

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best_Practices_Environmental_Cleaning_2012.pdf

Section 7: Principles of Cleaning and **Disinfecting Environmental Surfaces**

Policy number: 7.3

Issued: **September 2015**

Subject: Selection of Finishes and **Surfaces in Client Care Areas**

Revised:

Distribution: All FNIHB Staff

PURPOSE 1

- High-touch environmental surfaces of the health care setting hold a greater risk of becoming contaminated with infectious agents than do public areas of non-health care organizations. Health care settings are complex environments due to the nature of activities and assessments performed, and the activities, interactions and behaviors of health care providers (HCP), with clients and visitors within the health care setting. This increases the likelihood of direct and indirect contact with infectious agents and contaminated surfaces, many of which may constitute a risk to HCP, clients, and visitors in the environment.
- 1.2 Some of these infectious agents can survive for extended periods of time on environmental surfaces. Clients using these same surfaces may also shed microorganisms into the health care environment and these surfaces may subsequently be touched by other health care providers and clients.
- 13 Health care professionals (HCP) may also inadvertently contaminate surfaces when performing assessments or procedures. Therefore as a result of cross contamination, health care facilities may contribute to the spread of infections.
- 1.4 Environmental cleaning disrupts the transfer of infectious agents to HCPs' hands and to other clients.
- Therefore, when selecting items for the health care facility all finishes and surfaces of all 1.5 equipment, furnishings, floors, ceiling, walls, need to be carefully considered for ease of cleaning. There also needs to be a review process in place to identify when items must be discarded, when they can no longer be cleaned due to permanent damage or general wear and tear.

2 **POLICY**

2.1 When choosing or replacing furnishings, equipment, and finishes in a health facility, infection prevention and control principles (IPAC) must be considered. In addition, staff from Occupational Health and Safety must be involved in the decision-making process regarding the best and most practical choices for these items.

3 **PROCEDURE**

- 3.1 Surfaces in the Health Care Centre/Nursing Station
 - 3.1.1 When choosing furnishings, equipment, and selecting surfaces in client areas seek IPAC expertise when choosing materials
 - 3.1.2 The following criteria should be included in the decision-making process:
 - 3.1.2.1 Ease of maintenance and repair:
 - 3.1.2.1.1 Fabrics that are permeable, or vinyl fabrics that are easy to tear allow for entry of infectious agents and cannot be properly cleaned
 - 3.1.2.1.2 Items that are scratched or chipped allow for accumulation of infectious agents and are more difficult to clean and disinfect

3.1.2.2 Cleanable:

- 3.1.2.2.1 Furnishings, walls and equipment must be able to withstand cleaning and be compatible with hospital-grade detergents, cleaners and disinfectants
- 3.1.2.2.2 Upholstered furniture in care areas must be covered with fabrics that are fluid-resistant, non-porous and can withstand cleaning with hospital-grade disinfectants
- 3.1.2.3 Inability to support microbial growth:
 - 3.1.2.3.1 Materials that hold moisture are more likely to support microbial growth
 - 3.1.2.3.2 Materials such as metals and hard plastics are less likely to support microbial growth
- 3.1.2.4 Surface porosity:
 - 3.1.2.4.1 Infectious agents have been shown to survive on porous fabrics such as cotton, cotton terry, nylon and polyester, and on plastics such as polyurethane and polypropylene
 - 3.1.2.4.2 Porous upholstered furniture and furnishings should not be used in care areas
- 3.1.2.5 Absence of seams
 - 3.1.2.5.1 Seams may trap bacteria and are difficult areas to clean

NOTE: Surfaces treated with antimicrobials are not recommended as their usage is not currently supported by research

- 3.2 Walls and Flooring In the Health Facility
 - 3.2.1 All wall treatments and floor finishes in clinical areas should be chosen with cleaning in mind especially where contamination with blood or body fluid/substances is a possibility. The followed surface characteristics should be considered:
 - 3.2.1.1 Ease of maintenance/repair and cleanability
 - 3.2.1.2 Resistant to microbial spread and growth
 - 3.2.1.3 Smoothness (non-porous)
 - 3.2.1.4 Good sound absorption/acoustics
 - 3.2.1.5 Inflammability (Class 1 fire rating)
 - 3.2.1.6 Durability
 - 3.2.1.7 Sustainability
 - 3.2.1.8 Presence of low levels of volatile organic compounds (VOC) to reduce off-gassing
 - 3.2.1.9 Low smoke toxicity
 - 3.2.1.10 Initial and life cycle cost-effectiveness
 - 3.2.1.11 Slip-resistance
 - 3.2.1.12 Ease of installation, demolition and replacement
 - 3.2.1.13 Seamlessness
 - 3.2.1.14 Resilience and impact resistance non-toxic and non-allergenic
 - 3.2.1.15 Water impermeable in areas where water or dampness can occur
- 3.3 Cloth and Soft Furnishing in the Health Facility
 - 3.3.1 Cloth furnishings have been shown to harbour higher concentrations of fungi than non-porous furnishings. When they are replaced due to wear, soil or inability to clean, an alternative to cloth surfaces should be selected.
 - 3.3.2 Cloth items such as curtains, pillows, mattresses and soft furnishings should:
 - 3.3.2.1 Be seamless where possible or have double-stitched seams
 - 3.3.2.2 Be easily accessed for cleaning
 - 3.3.2.3 Have removable covers for cleaning
 - 3 3 2 4 Have foam cores that are resistant to mould
 - 3.3.2.5 Not be damaged by hospital grade detergents and disinfectants

- 3.3.2.6 Be quick-drying
- 3.3.2.7 Be maintained in good repair
- 3.3.3 A regular cleaning regimen should be in place. Any item that is visibly contaminated with blood or body fluids must be immediately cleaned and disinfected or removed from the setting.
- 3.3.4 The coverings on soft furniture must be cleanable with a hospital-grade disinfectant.
- 3.3.5 Replace worn, stained or torn items as soon as possible.
- 3.3.6 Do not use upholstered furniture and other cloth or soft furnishings that cannot be cleaned in care areas.
- 3.4 Carpeting in the Health Facility
 - 3.4.1 The choice of whether to use carpeting in a particular care areas should be based upon the likelihood of spills of blood and body substances, contaminated liquids or alcohol-based hand rub which could pose a flammability risk.
 - 3.4.2 If carpeting is used in other areas, the following must be considered:
 - 3.4.2.1 Carpet must be cleanable with hospital-grade cleaners and disinfectants
 - 3.4.2.2 Carpet tiles have the advantage of being easily removed, discarded and replaced
 - 3.4.2.3 Water-resistant backing allows for better drying of carpet with reduced likelihood of mould accumulation under the carpet. If carpeting is still wet after 48 hours, the risk of mould increases. **Carpeting that remains wet after 72 hours must be removed**.
 - 3.4.2.4 The type of material may influence the efficacy of disinfectants
 - 3.4.2.5 Trained staff and specialized cleaning equipment and procedures are required for adequate carpet cleaning
 - 3.4.2.6 Carpet age older carpets accumulate deep dust which becomes surface and airborne dust after activity on the carpet.
- 3.5 Plastic Coverings Health Facility
 - 3.5.1 Safe practices for plastic coverings, including mattress covers and pillow covers, include:
 - 3.5.1.1 Clean plastic coverings on a regular basis
 - 3.5.1.2 Inspect for damage:
 - 3.5.1.2.1 Replace mattress and pillow covers when torn, cracked as well as when there is evidence of liquid penetration.
 - 3.5.1.2.2 The mattress or pillow should be replaced if it is visibly stained.

- Clean plastic coverings (e.g. mattress covers, keyboard covers) with hospital-grade 3.5.2 disinfectants that are compatible with the covering. (Check manufacturer's instructions for cleaning).
- 3.6 Electronic Equipment in the Health Facility
 - 3.6.1 When purchasing new equipment, only keypads, mouse and monitoring screens that may be easily cleaned and disinfected should be considered and should be compatible with cleaning and disinfecting products.
 - 3.6.2 Plastic skins may be effective to cover computer keyboards, allowing ease of cleaning. (See above).
 - 3.6.3 Electronic equipment that cannot be adequately cleaned, disinfected or covered to allow appropriate cleaning should not enter the immediate care environment.

REFERENCES

Friedman, C., & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Harvey, C., Keen, M., & Snell, R. (2011). Canadian Health Care Facilities (CSA Z8000 - 11) [PowerPoint slides].

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

The Facility Guidelines Institute. (2010). Guidelines for Design and Construction of Outpatient Facilities.

Section 7: Principles of Cleaning and

Disinfecting Environmental Surfaces

Subject: Cleaning Products and

Disinfectants

Distribution: All FNIHB Staff

Policy number: **7.4**

Issued: **September 2015**

Revised:

1 PURPOSE

- 1.1 High-touch environmental surfaces of the health care setting hold a greater risk of becoming contaminated with infectious agents than do public areas of non-health care organizations. Health care settings are complex environments due to the nature of activities and assessments performed, and the activities, interactions and behaviors of health care providers (HCP), with clients and visitors within the health care setting. This increases the likelihood of direct and indirect contact with infectious agents and contaminated surfaces, many of which may constitute a risk to HCP, clients, and visitors in the environment.
- 1.2 Some of these infectious agents can survive for extended periods of time on environmental surfaces. Clients using these same surfaces may also shed microorganisms into the health care environment and subsequently be touched by other health care providers and clients.
 - 1.2.1 *Cleaning* is the removal of foreign material (e.g. dust, soil, organic material such as blood, secretions, excretions and microorganisms) from a surface or object. Environmental cleaning disrupts the transfer of microorganisms to health care providers' hands and to other clients
 - 1.2.2 Cleaning physically removes rather than kills microorganisms, reducing the organism load on a surface. It is accomplished with water, detergents and mechanical action. The key to cleaning is the use of friction to remove microorganism and debris. Thorough cleaning is required for any equipment/device to be disinfected, as organic material may inactivate a disinfectant.
 - 1.2.3 **Disinfection** is a process used on inanimate objects and surfaces to kill microorganisms. Disinfection will kill most disease-causing microorganisms but may not kill all bacterial spores. Only sterilization will kill all forms of microbial life. In most health care settings cleaning and disinfection is accomplished through a one-step process using a combined cleaner/disinfector product.

2 POLICY

2.1 Equipment and surfaces in all health facilities must be cleaned with approved hospital-grade cleaners and disinfectants. Equipment cleaning/disinfection must be done as soon as possible after items have been used. All products used must have a drug identification number (DIN) from Health Canada.

2.2 Personal protective equipment (PPE) must be worn as required by Routine Practices, Additional Precautions and by WHMIS recommendations on MSDS when handling chemicals. PPE shall be removed immediately after the task for which it is worn.

3 PROCEDURE

- 3.1 Detergents and Cleaning Agents
 - 3.1.1 Environmental cleaning is a critical component in breaking the chain of transmission.
 - 3.1.1.1 *Cleaning* does not kill germs, it physically removes them using water, detergents and friction
 - 3.1.1.2 *Detergents* allow oils and the dirt attached to them to be washed away with water
 - 3.1.2 Cleaning to remove organic material must **always precede** disinfection or sterilization because residual debris reduces the effectiveness of the disinfection process.
 - 3.1.3 Equipment cleaning/disinfection must be done as soon as possible after items have been used.
 - 3.1.4 Cleaning Products:
 - 3.1.4.1 Must have a drug identification number (DIN) from Health Canada if they contain a disinfectant
 - 3.1.4.2 Must be clearly labeled and include WHMIS information and MSDS
 - 3.1.4.3 Must be used according to the manufacturers' recommendations for dilution, temperature, water hardness and use
 - 3.1.4.4 Must be used with the required personal protective equipment (PPE) for staff safety.
 - 3.1.4.5 Must be stored safely in a housekeeping closet

3.2 Disinfectants

- 3.2.1 Disinfectants rapidly kill or inactivate most infectious agents, but may not kill all bacterial spores. Disinfectants are only to be used to disinfect and must not be used as general cleaning agents, unless combined with a cleaning agent as a cleaner-disinfector.
- 3.2.2 When choosing a disinfectant the following factors must be considered:
 - 3.2.2.1 Disinfectant must have a drug identification number (DIN) from Health Canada
 - 3.2.2.2 The nature of the item to be disinfected
 - 3.2.2.3 Duration of contact time required for efficacy at the usual room temperature of the health care setting

3.2.2.4 Occupational health considerations

- 3.2.2.4.1 Personal protective equipment (PPE) required for the safe use of the cleaning / disinfectant products
- 3.2.2.4.2 Ingredients that may cause skin and respiratory irritation
- 3.2.2.4.3 Disinfectants are one of the leading allergens affecting health care providers and therefore there should be **no spraying** of disinfectants.
- 3.2.2.4.4 Health care providers will be more likely to use products that are non-toxic and not irritating
- 3.2.2.4.5 Safe for the environment e.g. biodegradable
- 3.2.2.5 Low level hospital-grade disinfectants are adequate for environmental surface cleaning in all health care settings.
- 3.2.3 For effective disinfection, always:
 - 3.2.3.1 Ensure that the item or surface be free from visible soil, organic matter and other substances that might interfere with the action of the disinfectant
 - 3.2.3.2 A hospital-grade disinfectant may be used for equipment that only touches intact skin (e.g. blood pressure cuffs). See Table 1 below.
 - 3.2.3.3 Wear PPE appropriate to the product(s) used
 - 3.2.3.4 Follow the manufacturer's instructions when diluting products
 - 3.2.3.5 Follow manufacturer's instructions regarding contact time with product
 - 3.2.3.6 Do not "double-dip" (cloth does not go into disinfectant more than once, or the cloth will dilute and contaminate the solution)
 - 3.2.3.7 Keep cleaning equipment (e.g. mop heads) clean and dry when not in use
 - 3.2.3.8 For specific step-by-step procedures refer to the FNIHB-OR Environmental Cleaning Procedure Manual

3.3 Disinfectant Wipes

- 3.3.1 Approved disinfectant wipes are used for:
 - 3.3.1.1 Items in the care environment that will not tolerate soaking
 - 3.3.1.2 Small items that must be cleaned and disinfected between clients at the point-of-care (e.g. stethoscope, electronic thermometer, otoscope, etc.)
 - 3.3.1.3 Equipment/items that come in contact with only intact skin.
- 3.3.2 They should not be used as a routine cleaning disinfectant tool for other equipment and for equipment that comes in contact with non-intact skin or mucous membranes e.g. thermometers etc.

- 3.3.3 When using disinfectant wipes:
 - 3.3.3.1 The active ingredient must be an appropriate hospital-grade disinfectant
 - 3.3.3.2 Wipes must be kept wet and discarded if they become dry
 - 3.3.3.3 Wipes must have an MSDS and be used according to the MSDS (e.g. wear gloves when handling)
 - 3.3.3.4 If using wipes for cleaning and disinfection of large pieces of equipment, multiple wipes are required

Table 1: Cleaning and Disinfection Decision Chart for Non-Critical Equipment

Level of Cleaning and	Classification of	Effective Products
Disinfection	Equipment/Device	
Cleaning Physical removal of soil, dust or foreign material Chemical, thermal or mechanical aids may be used Cleaning usually involves soap and water, detergents or enzymatic cleaners Thorough cleaning is required before disinfection or sterilization may take place	All reusable equipment/devices	 Concentration and contact time are dependent on manufacturer's instructions Quaternary ammonium compounds (QUATS) Enzymatic cleaners Soap and water Detergents 0.5% Hydrogen peroxide enhanced action formulation (HP-EAF)
Low-Level Disinfection Level of disinfection required when processing non-critical equipment/devices or some environmental surfaces Low-level disinfectants kill most vegetative bacteria and some fungi as well as enveloped (lipid) viruses Low-level disinfectants do not kill mycobacteria or bacterial spores	Non-critical equipment/devices (i.e. equipment/devices that touch only intact skin, basins, tourniquet, IV pumps, mechanical lifts, wheelchairs, crutches, gurneys / stretchers, otoscopes, etc)	 Concentration and contact time are dependent on manufacturer's instructions 3% Hydrogen peroxide (30 minutes) 70-95% Alcohol (10 minutes) NOTE: Alcohol-based hand rub or alcohol based wipes cannot be used as a low-level disinfectant as it's prepared for skin and not for environmental surfaces and equipment. Sodium hypochlorite (bleach) (1000 ppm) 0.5% Hydrogen peroxide enhanced action formulation (HP-EAF) (5 minutes) Quaternary ammonium compounds (QUATS) Iodophors Phenolics (should not be used in nurseries or equipment that comes into contact with infants such as scales)

Source: Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings, p. 155. Appendix F: Cleaning and Disinfection Decision Chart for Non-critical Equipment

Public Health Ontario. (2010). Infection Prevention and Control Resource Manual for Residential Hospice Settings, page 105-106.

4 REFERENCES

Friedman, C., & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Ontario. (2013). Environmental Cleaning Best Practices Educational Toolkit. Retrieved from:

http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental_Cleaning_Toolkit.aspx

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Section 7: Principles of Cleaning and

Disinfecting Environmental Surfaces

Subject: New Equipment and Product

Purchases

Distribution: All FNIHB Staff

Policy number: 7.5

Issued: **September 2015**

Revised:

1 PURPOSE

- 1.1 High-touch environmental surfaces of the health care setting hold a greater risk of becoming contaminated with infectious agents than do public areas of non-health care organizations. Health care settings are complex environments due to the nature of activities and assessments performed, and the activities, interactions and behaviors of health care providers (HCP), with clients and visitors within the health care setting. This increases the likelihood of direct and indirect contact with infectious agents and contaminated surfaces, many of which may constitute a risk to HCP, clients, and visitors in the environment.
- 1.2 Some of these infectious agents can survive for extended periods of time on environmental surfaces. Clients using these same surfaces may also shed microorganisms into the health care environment and these surfaces may subsequently be touched by other health care providers and clients.
- 1.3 Therefore, when purchasing any new equipment or products that are used in the provision of care to clients they must be capable of being cleaned and disinfected according to the most current standards and guidelines.

2 POLICY

2.1 When purchasing any new equipment or products that are used in the provision of care to clients, items must be capable of being cleaned and disinfected according to the most current IPAC standards and guidelines. In addition, personnel from Environmental Services must be involved in the decision-making process regarding the best and most practical choices for these items.

3 PROCEDURE

- 3.1 When purchasing new non-critical medical equipment:
 - 3.1.1 Do not purchase medical equipment that cannot be cleaned and disinfected according to the recommended IPAC standards
 - 3.1.2 When purchasing cleaning agents or equipment, consideration must be given to occupational health requirements (staff safety, ergonomics, training requirements), client safety, IPAC standards, and environmental safety issues

- 3.1.3 All non-critical medical equipment that will be purchased and will be cleaned must include written item-specific manufacturer's cleaning and disinfection instructions.
- 3.1.4 Items that are provided by outside agencies and returned to the agency for cleaning and disinfection are subject to the same standards as in-house equipment.

4 REFERENCES

Friedman, C., & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Ontario. (2010). Infection Prevention and Control Resource Manual for Residential Hospice Settings. Retrieved from http://www.ontla.on.ca/library/repository/mon/25001/307210.pdf

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2^{nd} Edition . Retrieved from http://www.publichealthontario.ca/en/eRepository/Best_Practices_Environmental_Cleaning_2012.pdf

Section 7: **Principles of Cleaning and Disinfecting Environmental Surfaces**

Policy number: **7.6**

Subject: Routine Practices While

Issued: **September 2015**

Cleaning

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

- 1.1 The principles of Routine Practices are based on the premise that all clients and their environment might potentially be contaminated with harmful infectious agents. By following simple preventive practices at all times regardless of whether or not an illness is known, health care providers will be protecting clients and themselves from an unknown, undiagnosed infectious risk. Routine Practices related to environmental cleaning include:
 - 1.1.1 Hand hygiene
 - 1.1.2 Use of personal protective equipment (PPE) when indicated
 - 1.1.3 Standardized cleaning procedures
- 1.2 Routine cleaning is necessary to maintain a specific measure of cleanliness, i.e. Hotel Clean, Hospital Clean. Consistent and effective routine cleaning practices reduce the transmission of infectious agents.

Refer to Section 3.0: Routine Practices for more information regarding routine practices.

2 POLICY

2.1 All health care workers and environmental cleaning workers must adhere to routine practices when cleaning. All health care workers and environmental cleaning workers must follow standardized cleaning procedures as outlined in the current edition of *FNIHB-OR Environmental Cleaning Procedure Manual*.

3 PROCEDURE

- 3.1 Hand Hygiene:
 - 3.1.1 Hand hygiene is the most important and effective IPAC measure to prevent the spread of healthcare-associated infections. Hand hygiene must be practiced:
 - 3.1.1.1 Before initial client/client environment contact i.e. before you enter the room
 - 3.1.1.2 Before performing an aseptic procedure

- 3.1.1.3 Immediately after a body fluid exposure risk
- 3.1.1.4 After client/client environment contact i.e. before leaving the room; or after touching something in the client's environment and before touching the client again.
- 3.1.2 The use of gloves does not replace the need for hand hygiene. It is necessary to clean hands after removing gloves. Gloves must be task specific, and must be changed as the HCP changes tasks with the same client.
- 3.1.3 Alcohol-based hand rub (ABHR) is recommended after activities that do not result in visible soiling of the hands such as dusting, mopping and vacuuming.
- 3.1.4 Soap and running water are the recommended method when hands are visibly soiled.
- 3.1.5 Dedicated hand washing sinks are preferred for hand washing with soap and water, to avoid splashback of infectious agents onto clean hands during rinsing.
- 3.1.6 Hand washing sinks must not be used for other purposes, such as disposal of fluids or cleaning of equipment.
- 3.1.7 Refer to Policy 2.0: Hand Hygiene. Refer to FNIHB-OR Environmental Cleaning Procedure Manual
- 3.2 Use of Personal Protective Equipment (PPE):
 - 3.2.1 PPE refers to a variety of barriers used alone or in combination to protect mucous membranes, airways, skin and clothing from contact with infectious agents and from chemical agents. Environmental cleaning workers and health care workers should wear PPE:
 - 3.2.1.1 For protection from infectious agents
 - 3.2.1.2 For protection from chemicals used in cleaning
 - 3.2.1.3 To prevent transmission of microorganisms from one client environment to another, PPE must be removed after each individual's room or space.
 - 3.2.2 All employers providing cleaning services to health centres and nursing stations must ensure that:
 - 3.2.2.1 PPE is sufficient and accessible for all cleaning staff
 - 3.2.2.2 WHMIS training regarding safe and appropriate handling of chemicals is provided.
 - 3.2.2.3 Training on routine practices, and additional precautions, and special training on handling of waste and of biohazardous material is provided by the employer
 - 3.2.2.4 Environmental cleaning workers have been trained in the correct use, application and removal of PPE

- 3.2.3 PPE is used to prevent contact with blood, body fluids, secretions and excretions and includes:
 - 3.2.3.1 **Gloves** when there is a risk of hand contact with blood, body fluids, secretions or excretions or items contaminated with these
 - 3.2.3.2 **Gown** if contamination of clothing is anticipated
 - 3.2.3.3 **Mask and eye protection or face shield** where appropriate to protect the mucous membranes of the eyes, nose and mouth during activities involving close contact with clients likely to generate splashed or sprays of secretions (e.g. coughing, sneezing or where there is a risk of splashes from cleaning solutions)
 - 3.2.3.4 Refer to Policy 3.3: Use of Personal Protective Equipment

3.2.4 Glove Use in Environmental Services:

- 3.2.4.1 Prolonged wearing of gloves is not recommended because of:
 - 3.2.4.1.1 Increased risk of irritant contact dermatitis from sweat and moisture within the glove
 - 3.2.4.1.2 Breakdown of the glove material itself and risk of tears
- 3.2.4.2 Change or remove gloves after contact with a client environment and before contact with another client environment to prevent the spread of infectious agents. Environmental cleaning workers must not walk from room to room and other areas of the health care facility wearing the same pair of gloves.
- 3.2.4.3 Gloves must be removed immediately after the activity for which they were used and if disposable, discarded. Hand hygiene is performed whenever removing gloves.
- 3.2.4.4 Gloves must be used as an additional measure of protection and are not a substitute for hand hygiene.
- 3.2.4.5 Disposable gloves must never be washed or re-used. They are single use only.
- 3.2.4.6 Assess and select the most appropriate type of glove to be worn for the activity about to be performed. Selection of gloves should be based on a risk analysis of:
 - 3.2.4.6.1 The type of setting
 - 3.2.4.6.2 The task to be performed
 - 3.2.4.6.3 The likelihood of exposure to body substances
 - 3.2.4.6.4 The length of use

- 3.2.4.6.5 The amount of stress on the glove
- 3.2.4.6.6 The glove requirements identified in the MSDS must be followed when using a chemical agent

NOTE: Nitrile gloves are recommended for <u>all</u> environmental cleaning tasks with the exception of tasks that have a high risk for percutaneous injury (e.g. handling waste and sharps) in which case heavy duty gloves are recommended. (Refer to Policy 3.3: Use of Personal Protective Equipment).

- 3.2.5 Gowns, Masks and Eye Protection in Environmental Services
 - 3.2.5.1 A gown, mask and eye protection are **not** required for routine cleaning activities, however, when using chemical agents, PPE requirements identified on Material Safety Data Sheets (MSDS) must be followed e.g. wearing facial protection when mixing chemical agents when there is a risk of splashing.
- 3.3 Standardized Cleaning Procedures
 - 3.3.1 Each health facility must have standardized cleaning procedures in place to ensure that:
 - 3.3.1.1 Cleaning is done on a regular schedule i.e. a continuous event
 - 3.3.1.2 Cleaning procedures incorporate IPAC principles
 - 3.3.1.3 Cleaning standards, frequency, and accountability for cleaning are clearly defined (i.e. who cleans, what do they clean, how is the item cleaned, what chemical and dilution of chemical is used, and when do they clean it)
 - 3.3.1.4 Cleaning schedules ensure that no area or item is missed from routine cleaning
 - 3.3.1.5 Statutory requirements are met in relation to:
 - 3.3.1.5.1 The safe disposal of clinical waste
 - 3.3.1.5.2 The safe handling of linen
 - 3.3.1.5.3 Food hygiene
 - 3.3.1.5.4 Pest control
 - 3.3.2 Routine cleaning practices are used wherever cleaning is done. Routine cleaning is necessary to maintain a specific measure of cleanliness, i.e. Hotel Clean, Hospital Clean. (Refer to Policy 7.2: Levels of Clean)
 - 3.3.3 Refer to Routine Practices and standardized step-by-step cleaning procedures in the current edition of *FNIHB- OR Environmental Cleaning Procedure Manual*

4 REFERENCES

First Nations Inuit Health Branch-Ontario Region. (2013). Environmental Cleaning Procedure Manual. Retrieved from https://www2.onehealth.ca

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best_Practices_Environmental_Cleaning_2012.pdf

Public Health Ontario. (2013). Environmental Cleaning Toolkit. Retrieved from http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental_Cleaning_Toolkit.aspx

Section 7: Principles of Cleaning and

Disinfecting Environmental Surfaces

Subject: Additional Precautions While

Cleaning

Policy number: 7.7

Issued: **September 2015**

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 Additional precautions (i.e. contact precautions, droplet precautions, a combination of droplet and contact precautions, and airborne precautions) are infection prevention and control interventions which are used **in addition to routine practices** to protect staff and clients by interrupting the transmission of specific infectious agents. Refer to Section 4.0: Additional Precautions for more information.

2 POLICY

- 2.1 All health care workers must adhere to additional precautions **in addition to** routine practices when a sign is posted on a health facility door. (Refer to Appendix 42: Risk Assessment, Routine Practices plus Additional Precaution). All environmental cleaning workers must speak to the Nurse prior to entering the room.
- 2.2 Personal protective equipment (PPE) will be worn in accordance to the signage posted. Staff will be taught how to safely don and doff equipment so self- contamination will not occur. Hand hygiene will always follow after donning and doffing PPE.

3 PROCEDURE

Refer to FNIHB-OR Environmental Cleaning Procedure Manual Part 2: Risk Assessment and Routine Practices to Prevent Infection

- 3.1 If additional precautions are required in the health facility, it is the nurse's responsibility to post appropriate signage (Refer to Appendix 42: Risk Assessment, Routine Practices and Additional Precautions) as soon as possible and to communicate to the environmental cleaning workers any additional information and/or instructions that may impact them and/or environmental cleaning practices for the specific location where this is required.
- 3.2 If an environmental cleaning worker sees signage (Refer to Appendix 24: Contact Precautions, Appendix 30: Droplet Precautions, Appendix 34: Droplet + Contact Precautions, and Appendix 35: Airborne Precautions) posted on a health facility door that indicates contact precautions, droplet precautions, droplet and contact precautions or airborne precautions are necessary, they must stop and not enter the room.

- 3.3 Prior to entering the room, the environmental cleaning worker must immediately speak to the Nurse-in-Charge (NIC) to obtain specific directions regarding the use of specific PPE and other instructions such as requirements for extra cleaning practices.
- 3.4 If the NIC is not available, the door to the room must remain closed and the environmental cleaning worker must not enter the room.
- 3.5 Refer to Policy 4.1: Additional Precautions for more information.

4 APPENDICES

Appendix 24: FNIHB-OR: Environmental Cleaning Procedure Manual Part 2: Risk Assessment and Routine Practices to Prevent Infection. Contact Precautions

Appendix 30: FNIHB-OR: Environmental Cleaning Procedure Manual Part 2: Risk Assessment and Routine Practices to Prevent Infection. Droplet Precautions

Appendix 34: FNIHB-OR: Environmental Cleaning Procedure Manual Part 2: Risk Assessment and Routine Practices to Prevent Infection. Droplet + Contact Precautions

Appendix 35: FNIHB-OR: Environmental Cleaning Procedure Manual Part 2: Risk Assessment and Routine Practices to Prevent Infection. Airborne Precautions

Appendix 42: FNIHB-OR: Environmental Cleaning Procedure Manual Part 2: Risk Assessment, Routine Practices Plus Additional Precautions

5 REFERENCES

First Nations Inuit Health Branch-Ontario Region. (2013). Environmental Cleaning Procedure Manual. Retrieved from https://www2.onehealth.ca

Public Health Agency of Canada (2013) Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Public Health Ontario. (2013). Environmental Cleaning Toolkit. Retrieved from http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental_Cleaning_Toolkit.aspx

Section 7: **Principles of Cleaning and Disinfecting Environmental Surfaces**

Policy number: **7.8**

Issued: September 2015

Subject: Frequency of Routine Cleaning

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 A clean and safe environment is an important component of infection prevention and control. All surfaces in a health facility have the potential to harbour infectious organisms. The potential for exposure to infectious organisms is based on the frequency of contact with contaminated surfaces/medical equipment, the type of activity involved, the vulnerability of the health care provider, client or visitor, and how frequently hand hygiene is performed. High-touch surfaces require a more frequent cleaning regimen, whereas low-touch surfaces that have minimal contact with hands require less frequent cleaning. Adequate human resources are necessary in order for good environmental cleaning practices to be performed properly and at the correct frequency, thereby reducing the risk of transmission of infectious diseases. The process and products used for cleaning and disinfection of surfaces and medical equipment must also be compatible with the surfaces/equipment.

2 POLICY

2.1 All clients, visitors, and health care providers using health facilities are entitled to, and expect to work and be cared for, in a clean environment. All environmental cleaning personnel working in health facilities must perform environmental cleaning duties according to standardized cleaning procedures and follow appropriate cleaning frequencies with standardized cleaning products for equipment and surfaces as outlined in the current edition of FNIHB-OR Environmental Cleaning Procedure Manual.

3 PROCEDURE

- 3.1 The frequency of cleaning and disinfecting individual items or surfaces in a public or client area depends on:
 - 3.1.1 Whether surfaces are high-touch or low-touch i.e. touched more frequently or less frequently
 - 3.1.2 The vulnerability of clients in the area who may be more susceptible to infectious agents (e.g. health status of people coming into contact with infectious agents)

- 3.1.3 The probability that a surface, piece of equipment or care area will be contaminated (e.g. the environment of a client treatment room will likely have a greater risk of exposure to blood, body fluids and other infectious agents than would an administrative office.)
- 3.1.4 Adequate human resources
- 3.2 Frequency of Contact With Surfaces
 - 3.2.1 High-Touch Surfaces
 - 3.2.1.1 Surfaces that have frequent contact with hands (e.g. doorknobs, telephones, light switches, computer keyboards)
 - 3.2.1.2 Cleaning and disinfection usually done at least daily and more frequently if the risk of environmental contamination is higher (e.g. treatment room)
 - 3.2.2 Low-Touch Surfaces
 - 3.2.2.1 Surfaces that have minimal contact with hands (e.g. floors, walls, ceilings, mirrors and window sills)
 - 3.2.2.2 Cleaning required on a regular (but not necessarily daily) basis and when soiling or spills occur
 - 3.2.3 To determine cleaning frequencies refer to Appendix 43: Cleaning Frequency Chart
- 3.3 Vulnerability of the Client Population
 - 3.3.1 More Susceptible
 - 3.3.1.1 Health care providers, clients and visitors who are more susceptible to infection due to their medical condition or lack of immunity
 - 3.3.2 Less Susceptible
 - 3.3.2.1 All other individuals are classified as less susceptible
- 3.4 Probability of Contamination of Items and Surfaces
 - 3.4.1 Heavy Contamination
 - 3.4.1.1 Surfaces and/or equipment routinely exposed to copious amounts of fresh blood or other body fluids (e.g. treatment room)
 - 3.4.2 Moderate Contamination
 - 3.4.2.1 Surfaces and/or equipment does not routinely (but may) become contaminated with blood or other body fluids as part of routine activity and the contaminated substances are contained or removed (e.g. all client areas and washrooms)

3.4.3 Light Contamination

3.4.3.1 Surfaces are least likely to be exposed to blood, other body fluids or items that have come into contact with blood or body fluids (e.g. offices)

3.5 Adequate Human Resources

- 3.5.1 To allow thorough and timely cleaning and disinfection
- 3.5.2 Refer to Appendix 44: Suggestions for Management of Environmental Cleaning Human Resources

4 APPENDICES

Appendix 43: Cleaning Frequency Chart

Appendix 44: Suggestions for Management of Environmental Cleaning Human Resources

5 REFERENCES

First Nation & Inuit Health Branch. (2011). A Guide to Developing and Implementing an Operations and Maintenance Plan for your Health Facility. Manuscript in preparation.

First Nations Inuit Health Branch-Ontario Region. (2013). Environmental Cleaning Procedure Manual. Retrieved from https://www2.onehealth.ca

Friedman, C., & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Public Health Ontario. (2013). Environmental Cleaning Toolkit. Retrieved from http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental_Cleaning_Toolkit.aspx

Public Health Ontario. (2013). Best Practices for Cleaning, Disinfection and Sterilization of Medical Equipment/Devices. 3rd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/PIDAC_Cleaning_Disinfection_and_Sterilization_2013. pdf

Section 7: Principles of Cleaning and

Disinfecting Environmental Surfaces

Subject: Re-usable Non-Critical

Equipment/Devices

Policy number: **7.9**

Issued: **September 2015**

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 A clean and safe environment is an important component of infection prevention and control. All reusable equipment/devices and non-critical equipment and devices (e.g. wheelchair, blood pressure cuff, stethoscope), that are used on multiple clients within health facilities have the potential to harbour infectious organisms. Reusable and non-critical medical equipment and devices that are within the client environment and used between clients, require cleaning and disinfection after each use. Selection of new equipment must include considerations related to effective cleaning and disinfection. The process and products used for cleaning and disinfection of medical equipment must also be compatible with the surfaces/equipment.

2 POLICY

2.1 All clients, visitors, and health care workers using FNIHB health facilities are entitled to and expect to work and be cared for, in a clean environment. All health care workers working in health facilities must clean and disinfect re-usable and non-critical medical equipment/devices between clients and immediately after each use. The delegation of responsibilities must be clearly outlined by each health facility. They must also ensure that they carry this out according to the manufacturer's recommendations and that the appropriate cleaning and disinfection products are compatible with the surfaces/equipment.

3 PROCEDURE

- 3.1 This procedure deals with the cleaning and disinfection of reusable **non-critical** medical equipment/devices which are defined by Spaulding's classification as equipment/devices that touch only intact skin and not mucous membranes, or do not directly touch the client. (For cleaning all other types of equipment refer to Section 8.0: Cleaning, Disinfection and Sterilization).
- 3.2 Each health facility must clearly assign the responsibility for cleaning **each specific piece of non-critical medical equipment** to either a health care provider (HCP) or an environmental cleaning worker. (Refer to Appendix 45: Cleaning and Disinfection Decision Chart for Non-Critical Equipment for suggestions).
- 3.3 It is the HCP's responsibility (i.e. NOT the environmental cleaning person's responsibility), to clean and disinfect reusable non-critical medical equipment/devices **between each client**.

- 3.4 All reusable **non-critical** medical equipment/devices (e.g. wheelchair, blood pressure cuff, stethoscope, etc.) that are within the client environment and used between clients require **cleaning** and low-level disinfection after each use.
- 3.5 Each health facility should have a system in place to clearly identify equipment that has been recently cleaned and disinfected from equipment that is in need of cleaning and disinfection. (e.g. brightly coloured laminated card attached to equipment indicating CLEAN or DIRTY).
- 3.6 Selection of new and/or replacement equipment must include considerations related to effective cleaning and disinfection (Refer to Policy 7.5: New Equipment and Product Purchases)
- 3.7 All cleaning and disinfecting products must:
 - 3.7.1 Have a DIN number from Health Canada
 - 3.7.2 Have a corresponding MSDS available on site
 - 3.7.3 Be compatible with the items to be cleaned and disinfected
 - 3.7.4 Be used according to manufacturers' recommendations for dilution and contact time
 - 3.7.5 Be approved by the IPAC Product Review Committee
 - 3.7.6 Be safe for the environment
 - 3.7.7 Be used with appropriate PPE if required

Refer to Appendix 45: Cleaning and Disinfection Decision Chart for Non-critical Equipment

- 3.8 For a list of non-critical client care equipment/environmental items and the recommendations for the level and frequency of cleaning and disinfecting of these items and delegation of responsibility for cleaning, please refer to Appendix 46: Recommended Minimum Cleaning and Disinfection Level and Frequency for Non-critical Client Care Equipment and Environmental Items.
- 3.9 All health care providers must adhere to routine practices while cleaning and disinfecting noncritical client care equipment with care taken to perform hand hygiene before and after cleaning equipment.

4 APPENDICES

Appendix 45: Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition, page 155. Retrieved from http://www.publichealthontario.ca/en/eRepository/best practices environmental cleaning 2012.pdf

Appendix 46: Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition, page 156-162. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best_Practices_Environmental_Cleaning_2012.pdf

5 REFERENCES

Friedman, C., & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

IPAC Canada. (2012). Position Statement: Cleaning and Disinfection of Non-Critical Multi-Use Equipment/Devices in Community Settings. Retrieved from http://ipac-canada.org/photos/custom/OldSite/pdf/CHIG%20Position%20Statement%202012Dec.pdf Health Canada First Nations Inuit Health Branch. (2013). Environmental Cleaning Procedure Manual Ontario Region. Retrieved from https://www2.onehealth.ca

Public Health Ontario. (2013). Environmental Cleaning Toolkit. Retrieved from http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental_Cleaning_Toolkit.aspx

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best_Practices_Environmental_Cleaning_2012.pdf

Public Health Ontario. (2013). Cleaning, Disinfection and Sterilization of Medical Equipment/Devices. 3rd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/PIDAC_Cleaning_Disinfection_and_Sterilization_2013.pdf

Section 7: Principles of Cleaning and **Disinfecting Environmental Surfaces**

Policy number: 7.10

Subject: Cleaning and Disinfection of

Issued: **September 2015**

Electronic (IT) Devices

Revised:

Distribution: All FNIHB Staff

PURPOSE 1

Electronic devices (e.g. cellular phones, tablets, portable computers, monitors, keyboards, mice, hand held devices, smartphones etc.) are increasingly important in client care areas of health facilities. These devices require proper cleaning and disinfection in order to prevent the transmission of infectious agents to staff, clients and visitors via the workstation or device. The process and products used for cleaning and disinfection of electronic devices in health facilities must also be compatible with the equipment.

POLICY

- 2.1 All clients, visitors, and health care workers using health facilities are entitled to and expect to work and be cared for, in a clean environment. All health care workers working in health facilities must clean and disinfect electronic (IT) devices, including personal devices and accessories that:
 - 2.1.1 Stay with the health care worker in clinical areas (e.g. smartphone)
 - 2.1.2 Are used for client teaching and may stay with the client in clinical areas; and
 - 2.1.3 Move from client to client in clinical areas (e.g. computer/workstation on wheels).
- 2.2 HCPs must also ensure that they carry this out according to the manufacturer's recommendations and that the appropriate cleaning and disinfection products are compatible with the surfaces/equipment.

3 **PROCEDURE**

- 3.1 The user/owner of an IT device is responsible for routine cleaning and disinfection of the device. IT devices should be approached with clean hands. The user/owner must clean and disinfect personal electronic (IT) devices as well as health facility multi-use IT equipment between clients and before leaving client care areas Many IT devices are used by more than one HCP, and as such they should be cleaned frequently, and hand hygiene should also be performed before and after accessing the IT device.
- It is very important for each health facility to establish responsibility and schedules for routine 3.2 cleaning/disinfection of IT devices in client care areas.

- 3.3 Hand hygiene should be performed in accordance with the 4 Moments of Hand Hygiene, as well as before and after accessing an IT device (IT devices are considered to be either a "hospital" or a "personal" environment). Hand hygiene is the most important factor in the prevention of transmission of microorganisms.
- 3.4 Selection of new and or replacement equipment must include considerations related to the manufacturer's cleaning and disinfection recommendations to ensure their guidelines meet the standards for cleaning and low-level disinfection necessary for a health facility.
- 3.5 All cleaning and disinfecting products must:
 - 3.5.1 Have a DIN number from Health Canada
 - 3.5.2 Have a corresponding MSDS available on site
 - 3.5.3 Be compatible with the items to be cleaned and disinfected
 - 3.5.4 Be used according to manufacturer's recommendations for dilution and contact time
 - 3.5.5 Be safe for the environment
 - 3.5.6 Be used with appropriate PPE if required
- 3.6 All touch surfaces of IT devices used at, or near the point-of-care must be cleaned and disinfected with a hospital grade disinfectant if used or touched during the client encounter.
- 3.7 All surfaces should be cleaned with a soft wipe such as ACCEL Prevention Wipes or a cloth dampened with an approved cleaner/disinfectant. Obvious soil must be removed prior to the final wipe.
- 3.8 Liquid disinfectants must not be sprayed or poured directly onto IT devices.
- 3.9 Surfaces must be allowed to air dry before use.
- 3.10 If a screen becomes streaked or develops a film of cleaner/disinfectant, wipe with a soft, damp cloth and polish dry.
- 3.11 If an item cannot be cleaned with a hospital-grade disinfectant and is necessary for client care, a risk assessment should be done to determine the best approach to reduce the risk of transmission of microorganisms.
- 3.12 If an item cannot be adequately cleaned and will be accessed in a client care area, it requires an impervious keyboard cover, skin or solid fluid-resistant keyboard that can withstand frequent cleaning with a hospital-grade disinfectant.

3.13 All health care providers must adhere to routine practices while cleaning and disinfecting non-critical client care equipment with care taken to perform hand hygiene before and after touching each item, and cleaning equipment as well.

Table 1: Cleaning and Disinfection IT Devices – Frequency and Responsibility

Favinment/Devices Frequency and Responsibility Equipment/Devices Frequency and Responsibility Executed Frequency Responsibility		
Equipment/Device	Frequency	By Whom
Fixed system used at point-of-	Daily and between clients	User and/or as assigned by
care	Hand hygiene before accessing,	NIC OR cleaner
Wall mounted in	and after use of IT device	
client care area	5 11 11 11 11	77
Portable systems used by	Daily and between clients	User and/or as assigned by
multiple HCPs at point-of-		NIC
care, such as computers on	Hand hygiene before accessing,	
wheels, wireless laptops,	and after use of IT device	
tablets etc.		
Portable/fixed system used	Daily and between clients	User
near point-of-care (remains		
in hallway outside of client	Hand hygiene before accessing,	
care area).	and after use of IT device.	
All other fixed systems	Daily	User and/or as assigned by
located in clinical area –		NIC
nursing office or workstation,	Hand hygiene before accessing	
reprocessing area - single user.	the device when returning from	User
	the clinical area.	
	Hand hygiene when leaving the IT	
	device before returning to the	
	clinical area.	
	Between users	
Systems in non-clinical offices	Hand hygiene before accessing,	User
• Single user (e.g.	and after use of IT device	
personal computer)		User and/or as assigned
Multiple user	Weekly	a sor and or as assigned
workstation (e.g.	VVCCKIY	
photocopier)	Daily	
Systems in public areas for	Encourage hand hygiene before	Proprietor
client/visitor use	accessing, and after use of IT	Tiophetor
cheny visitor use	device	
	device	
	Daily	
Darganal avatama (magan asii	· ·	Owner/Hear
Personal systems (pager, cell	Daily sanitizing of device	Owner/User
phone, portable personal	Detrocan alienta if	
computer)	Between clients if accessed during	
	client care	
	Hand hygiene before and after use	
	of device.	

Adapted with permission from Saskatoon Health Region, (SHR) Infection Prevention & Control (IP&C).

REFERENCES

IPAC Canada. (2012). Position Statement: Cleaning and Disinfection of Non-Critical Multi-Use Equipment/Devices in Community Settings. Retrieved from http://ipaccanada.org/photos/custom/OldSite/pdf/CHIG%20Position%20Statement%202012Dec.pdf

Friedman, C., & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Public Health Ontario. (2013). Environmental Cleaning Toolkit. Retrieved from http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental Cleaning Toolkit.a spx

Saskatoon Health Region. (2012). Saskatoon Health Region Policies and Procedures Infection Prevention and Control. Retrieved from https://www.saskatoonhealthregion.ca/about/Pages/Policies-IPC.aspx

Section 7: Principles of Cleaning and Disinfecting Environmental Surfaces

Policy number: **7.11**

Disinfecting Diffic of the Surface

Issued: **September 2015**

Subject: Management of Linen and

Revised:

Laundry

Distribution: All FNIHB Staff

1 PURPOSE

1.1 Contaminated linen generated in a health facility requires the use of general principles of asepsis to reduce the risk of cross contamination to health care workers, environmental cleaning workers and the environment.

2 POLICY

- 2.1 All contaminated linen generated in a health facility must be handled in a safe manner that prevents the transmission of infectious diseases to clients, staff and visitors.
- 2.2 The principles of routine practices and additional precautions will be followed at all times. Routine application of personal protective equipment (PPE) in accordance with the assessed risk will be followed.

3 PROCEDURE

Refer to FNIHB-OR Environmental Cleaning Procedure Manual for more information.

- 3.1 General Principles of Linen and Laundry Management:
 - 3.1.1 Observe Routine Practices at all times (Refer to Section 3.0: Routine Practices)
 - 3.1.2 Sharps are disposed of at point-of-care to ensure that there are no residual sharps in linen.
 - 3.1.3 Environmental cleaning workers and health care workers handling linen and laundry are expected to be immunized against Hepatitis B (Refer to Policy 1.1: Staff Immunization) due to the risk of sharps injury.
 - 3.1.4 There should be a clear separation between clean and dirty laundry.
 - 3.1.5 If the health facility does its own laundry the following should be considered:
 - 3.1.5.1 The laundry area is in a dedicated space
 - 3.1.5.2 Staff do not consume food or beverages in laundry areas

- 3.1.5.3 Floors and walls are made of durable materials that can withstand moisture, water/steam, and are easily cleanable.
- 3.1.5.4 Hand washing sink and/or ABHR are located in all laundry work areas
- 3.1.5.5 Required PPE (e.g. gloves, gowns, facial protection) is available and worn when handling soiled laundry
- 3.1.5.6 Laundry equipment is used and maintained according to the manufacturers' instructions
- 3.1.5.7 Laundry is sorted according to the facility protocol
- 3.1.5.8 Gross soil is removed before washing (see below)
- 3.1.5.9 Laundry is washed at an appropriate temperature (see below)
- 3.1.5.10 A full dryer cycle is used with each load of wet laundry
- 3.1.5.11 Cloth linen bags are washed after each use and are washed in the same cycle as the linen contained in them
- 3.1.5.12 Clean laundry is sorted, packaged, transported and stored by methods that will ensure its cleanliness and protect from dust and soil during inter-facility loading (if done off-site), transport and unloading.
- 3.1.6 Hand hygiene is performed whenever gloves are changed or removed.
- 3.2 Handling of Soiled Linen:
 - 3.2.1 Wear disposable gloves when handling soiled linen; when linen is not wet or soiled, change linen after every patient treatment, procedure, or transport. It shall be placed in a no-touch receptacle at the point of use.
 - 3.2.2 Hand hygiene should be performed after handling soiled linen.
 - 3.2.3 All linen that is soiled with blood, body fluids, secretions or excretions is handled using the same precautions, regardless of infection status. Soiled linen should be placed in a notouch receptacle at the point of use.
 - 3.2.4 Gross soil (such as excessive feces or emesis) is removed with a gloved hand and tissue, and disposed into toilet. Gloves are then removed and hand hygiene performed.
 - 3.2.5 Contaminated laundry is bagged or contained at the point-of-care.
 - 3.2.6 Contaminated laundry is not sorted or pre-rinsed in care areas.
 - 3.2.7 Contaminated / soiled linen is handled with minimum agitation to avoid contamination of the air, surfaces and persons (e.g. loosely rolled up carefully into itself and placed directly into the laundry bag).

- 3.2.8 Wet laundry is contained before placing in laundry bag (e.g. wrapped in a dry sheet or towel)
- 3.2.9 Laundry carts or hampers used to collect or transport soiled linen need not be covered.
- 3.2.10 Linen bags are tied securely and are not over-filled.
- 3.2.11 Routine laundering practices are adequate for laundering all linens, regardless of source. Special handling of soiled linen for clients on Additional Precautions is not required.
- 3.2.12 Clean and soiled linen is stored and transported separately.
- 3.3 Washing and Drying Laundry:
 - 3.3.1 Client linen should be done as a separate cycle from environmental cleaning items such as cloths and mop heads. There should be posted instructions on washing and drying patient / client laundry.
 - 3.3.2 Temperature:
 - 3.3.2.1 If linen is washed at a high temperature ($\geq 71^{\circ}$ C/160°F), a hot water detergent for a complete wash cycle (≥ 25 minutes) must be used
 - 3.3.2.2 If low temperature (< 71°C/160 °F) water is used for laundry cycles (only for client personal laundry that is not heavily soiled):
 - 3.3.2.2.1 A detergent suitable for low temperature washing must be used i.e. cold water wash detergent
 - 3.3.2.2.2 The appropriate concentration of detergent must be used
 - 3.3.2.2.3 A complete wash cycle must be used
 - 3.3.2.3 A temperature in excess of 50 C (122 F) for at least 10 minutes is required to kill scabies mites and eggs.
 - 3.3.3 If bleach is used for linen disinfection, a level of at least 100 ppm of residual chlorine should be achieved for all laundry cycles. An online chlorine dilution calculator is available from Public Health Ontario at:

 http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Dilution-Calculator.aspx#.VE2zSBbb5KM
 - 3.3.4 Wet laundry should be thoroughly dried in a complete dryer cycle.
- 3.4 Clean Linen:
 - 3.4.1 Perform hand hygiene before handling clean linen.
 - 3.4.2 There should be a designated clean area to sort, package, and store clean linen.

- 3.4.3 Clean linen must be stored in a designated clean dry place with other clean items e.g. cupboard or shelf.
- 3.4.4 Clean linen should be transported in a manner that prevents inadvertent handling or contamination by dust and other airborne particles.
- 3.4.5 If clean linen is dropped on the floor, it is considered to be soiled and must be washed again before using.

4 REFERENCES

First Nations Inuit Health Branch-Ontario Region. (2013). Environmental Cleaning Procedure Manual. Retrieved from https://www2.onehealth.ca

Friedman, C., & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Agency of Canada. (2013). Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care Settings. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Section 7: **Principles of Cleaning and Disinfecting Environmental Surfaces**

Policy number: 7.12

a 1:

Issued: **September 2015**

Subject: Management of Waste

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 Waste generated by a health facility must be disposed of in accordance with provincial and local regulations and in a manner that prevents the transmission of infectious diseases to clients, staff, and visitors.

2 POLICY

2.1 All health facility generated waste must be disposed of in a safe and lawful manner.

3 PROCEDURE

Refer to FNIHB- OR Environmental Cleaning Procedure Manual for more information.

- 3.1 **<u>Biomedical Waste:</u>** is contaminated, infectious waste from a health care setting that requires treatment prior to disposal in landfill sites or sanitary sewer systems. Biomedical waste includes:
 - 3.1.1 Human anatomical waste
 - 3.1.2 Human and animal cultures or specimens (excluding urine and faeces)
 - 3.1.3 Human liquid blood and blood products
 - 3.1.4 Items contaminated with blood or blood products that would release liquid or semi-liquid blood if compressed
 - 3.1.5 Body fluids visibly contaminated with blood
 - 3.1.6 Body fluids removed in the course of surgery, treatment or for diagnosis (excluding urine and faeces)
 - 3.1.7 Sharps
 - 3.1.8 Broken glass which has come into contact with blood or body fluid
 - 3.1.9 PPE and medical supplies used in the provision of care to clients with a highly infectious disease (Category A Infectious Substance as defined by the Transportation of Dangerous Goods Regulations, section 2.36)

3.2 **Sharps**: are devices that are capable of causing a cut or puncture wound. Some examples of sharps include needles, sutures, lancets, blades and clinical glass.

NOTE: Procedures for waste management are based on provincial and municipal regulations and legislation. Specific legislation related to waste management may be found at the end of this policy.

- 3.2.1 All staff and personnel that handle waste are expected to be immunized and to maintain up-to-date immunization status as outlined in the edition of the Health Canada Occupational Health Assessment Guidelines (OHAG) according to Annex O (Recommended Immunizations and Screening Tests Related to Occupational Exposure). (Refer to Policy 3.1: Staff Immunization; Policy 3.2: Staff TST Screening/Assessment).
- 3.2.2 Non-immunized waste handlers should be offered all recommended immunizations including hepatitis B immunization at no cost to the employee. (Refer to Policy 3.1: Staff Immunization).
- 3.2.3 It is the health care provider's responsibility (i.e. **not** the environmental cleaner's responsibility) to handle sharps containers within the health facility.
- 3.3 Handling of Sharps:
 - 3.3.1 All health care providers that handle waste must receive education about the risks associated with sharps, including safe disposal of sharps in puncture-resistant containers, if found in the environment (e.g. sharps in laundry, waste, floor etc.).
 - Refer to FNIHB-OR Environmental Cleaning Procedure Manual
 - 3.3.2 The prevention of sharps injuries is actively promoted in the health facility by implementing the following practices:
 - 3.3.2.1 Rigid, puncture-resistant sharps containers are provided at or near the point-of-use to permit safe, one-handed disposal
 - 3.3.2.2 A tool (e.g. tongs) is used to pick up used needles that avoids picking them up by hand (Refer to FNIHB-OR *Environmental Cleaning Procedure Manual*, Section 8 Step-by-Step Procedures)
 - 3.3.2.3 As legislated, all facilities must use safety-engineered needles
 - 3.3.2.4 Used needles are NEVER re-capped
 - 3.3.2.5 HCPs NEVER reach into waste or sharps containers
 - 3.3.2.6 Sharps containers are replaced when they are three-quarters full or the sharps have reached the fill line, and the lid is securely closed
 - 3.3.2.7 Laundry is handled with care
 - 3.3.3 **Safe Disposal of Sharps**: The best way to remove a needle and syringe that has been disposed of incorrectly:
 - 3.3.3.1 Put on a pair of gloves

- 3.3.3.2 Ideally, take a sharps container to the needle and syringe
- 3.3.3.3 NEVER re-cap a needle and syringe even if a cap is available
- 3.3.3.4 Use tongs, or similar implement, to pick up the needle and syringe. If no implement is available, carefully pick up the needle and syringe with the needle furthest away from your fingers and body
- 3.3.3.5 Carefully place the needle and syringe in the sharps container
- 3.3.3.6 Report the incident to your supervisor or Nurse-in-Charge
- 3.3.4 All health care providers must be aware of the protocol to follow in the event of a sharps injury. (Refer to Policy 3.3: Occupational Exposure to Blood and Body Fluids).
- 3.4 Collection and Transportation of Waste:
 - 3.4.1 When handling waste, health care providers must wear personal protective equipment (PPE) appropriate to their risk.
 - 3.4.1.1 Protective gloves, footwear and other apparel appropriate to the task and anticipated risk
 - 3.4.1.2 Hand hygiene equipment (e.g. ABHR, soap and water, handwashing sink) available at point-of-care
 - 3.4.1.3 Health care providers who clean reusable waste containers, carts, final storage areas, or biomedical waste treatment equipment, wear:
 - 3.4.1.3.1 Gowns
 - 3.4.1.3.2 Heavy-duty, waterproof gloves
 - 3.4.1.3.3 Protective goggles or face shield
 - 3.4.2 Biomedical waste is handled and disposed of in a manner that avoids transmission of potential pathogens (Refer to Appendix 47: Disposal Streams for Biomedical and General Waste):
 - 3.4.2.1 Biomedical waste is segregated, at the point of generation, into either a plastic bag marked as Biomedical Waste or a rigid container with a non-removable lid
 - 3.4.2.2 Waste bags are of a thickness that will resist puncture, leaking and breaking, and they are waterproof
 - 3.4.2.3 Double-bagging is only necessary when the first bag becomes stretched or damaged, or when waste has spilled on the exterior
 - 3.4.2.4 When a bag is three-quarters full, it is closed and tied in a manner that prevents contents from escaping, and such that extra air is not sealed inside the bag.

- 3.4.3 Waste is transported within the facility according to the categories listed in the table below.
 - 3.4.3.1 Waste from several different categories is not mixed in one bag
 - 3.4.3.2 Waste is placed in appropriate containers at the point-of-care/use
- 3.4.4 Waste is transported within the health facility incorporating the following practices:
 - 3.4.4.1 Transport routes have been defined and communicated to health care providers
 - 3.4.4.2 If applicable, waste is transported in leak-proof containers that are cleaned on a regular basis
 - 3.4.4.3 Health care providers transporting waste avoid crossing through clean zones, public areas or treatment rooms
- 3.4.5 For transporting waste outside of the facility refer to Policy 7.1: Collection and Transportation of Laboratory Specimens.

3.5 Storage of Waste:

- 3.5.1 Waste is stored in a designated enclosed room with access limited to authorized health facility staff.
- 3.5.2 Refrigerated space at or below 4° C is provided for storage of anatomical waste and/or biomedical waste if stored for more than four days.
- 3.5.3 Biomedical waste storage areas are kept locked except where authorized health facility staff are on hand.
- 3.5.4 (If applicable), segregated waste is removed to central holding areas on a scheduled basis and is stored in leak-proof bins that are cleaned and disinfected prior to re-use.
- 3.5.5 Waste bags are not stored directly on the floor.
- 3.5.6 (If applicable) there is a contingency plan for dealing with the storage of refrigerated waste in the event of:
 - 3.5.6.1 Excess waste production
 - 3.5.6.2 The on-site cold storage unit or treatment equipment becomes inoperative; or
 - 3.5.6.3 Other disruption of disposal services.
- 3.6 Transportation of Biomedical Waste (Other Than Sharps)
 - 3.6.1 Contact the Zone Nurse Manager for direction on appropriate packaging and labelling of biomedical waste other than sharps as per the Transportation of Dangerous Good regulations.
 - 3.6.2 The Zone Nurse Manager will ensure the appropriate packaging material is made available for proper transportation and disposal.

3.7 Legislation Related to Medical Waste:

3.7.1 Biomedical Waste Handling

- 3.7.1.1 The *Environmental Protection Act, R.S.O. 1990*, Part V, Sections 19 and 27: Part XVII, Section 197: Guideline C-4, "The Management of Biomedical Waste in Ontario." Available online at: https://dr6j45jk9xcmk.cloudfront.net/documents/1761/197-biomedical-waste-en.pdf
- 3.7.1.2 Transport Canada's *Dangerous Goods Transportation Regulations*. Available at: http://www.tc.gc.ca/eng/tdg/clear-tofc-211.htm

3.7.2 Cytotoxic Waste Handling

- 3.7.2.1 The *Environmental Protection Act, R.S.O. 1990*, Part V, Sections 19 and 27; Part XVII, Section 197: Guideline C-4, The Management of Biomedical Waste in Ontario". Available online at: https://dr6j45jk9xcmk.cloudfront.net/documents/1761/197-biomedical-waste-en.pdf
- 3.7.2.2 The *Occupational Health & Safety Act, R.S.O. 1990*, c.0.1 including *Health Care and Residential Facilities O. Reg.*67/93, *Sec.* 97. Available online at: http://www.e-laws.gov.on.ca/html/regs/english/elaws-regs-930067 e.htm.
- 3.7.2.3 Canadian Standards Association's "Handling of Waste Materials in Health Care Facilities and Veterinary Health Care Facilities:" (Z317.10-01).

3.7.3 Chemical Waste Handling

- 3.7.3.1 The Environmental Protection Act, R.S.O. 1990:
 - 3.7.3.1.1 O.Reg 461/05 amending Reg. 347, R.R.O. 1990 dealing with hazardous and chemical waste. Available online at: http://www.e-laws.gov.on.ca/html/source/regs/english/2005/elaws_src_regs_r05461_e.htm);
 - 3.7.3.1.2 O.Reg 558/00 deals with hazardous and liquid chemical waste.

 Available online at: http://www.e-laws.gov.on.ca/html/source/regs/english/2000/elaws_src_regs_r00558_e.htm)
 - 3.7.3.1.3 O.Reg 718/94 deals with sterilants. Available online at: http://www.e-laws.gov.on.ca/html/regs/english/elaws-regs-940718-e.htm).
- 3.7.3.2 Canadian Standards Association's "Handling of Waste Materials in Health Care Facilities and Veterinary Health Care Facilities" (Z317.10-01).

4 APPENDIX

Appendix 47: Disposal Streams for Biomedical and General Waste

5 REFERENCES

First Nations Inuit Health Branch – Ontario Region. (2013). Environmental Cleaning Procedure Manual. Retrieved from https://www2.onehealth.ca

Friedman, C., Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Barlett Publishers

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Public Health Ontario. (2013). Environmental Cleaning Toolkit. Retrieved from http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental_Cleaning_Toolkit.aspx

Service Ontario. (2013). Needle Safety Regulation (O.Reg 474/07) under the Occupational Health and Safety Act. Retrieved from http://www.ontariocanada.com/registry/view.do?postingId=1762

Transport Canada. (2013). Transportation of Dangerous Goods Act and Regulations. Retrieved from http://www.tc.gc.ca/eng/tdg/safety-menu.htm

Section 7: **Principles of Cleaning and Disinfecting Environmental Surfaces**

Policy number: 7.13

Subject: Care and Storage of Cleaning

Issued: **September 2015**

Supplies and Utility Rooms

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 Cleaning equipment and storage rooms require attention to avoid cross-transmission of microorganisms and growth of microorganisms that can easily occur in dirty environments.

2 POLICY

- 2.1 Sufficient environmental cleaning rooms or closets must be provided throughout the health facility to maintain a clean and sanitary environment. All chemical cleaning agents and disinfectants need to be appropriately labelled and stored in a manner that eliminates risk of contamination, inhalation, skin contact or personal injury. Chemicals must be clearly labelled with Supplier or Workplace Labels in accordance with Workplace Hazardous Materials Information System (WHMIS) legislation and a Material Safety Data Sheet (MSDS) must be readily available for each item in case of accidents.
- 2.2 Workers will be provided WHMIS training on how to safely prepare, use, mix, store, discard each chemical, and what PPE is required for each product. Eyewash stations must be within 10 seconds of locations where chemicals are used / mixed / prepared.

3 PROCEDURE

- 3.1 **Environmental Cleaning Rooms/Closets**: are used by environmental cleaners who perform environmental cleaning duties (also referred to as "housekeeping duties") in the health facility. In general, an environmental cleaning room or closet:
 - 3.1.1 Is a dedicated room, not used for other purposes
 - 3.1.2 Shall be maintained in accordance with good hygiene practices
 - 3.1.3 Should have appropriate personal protective equipment (PPE) available
 - 3.1.4 Should have an appropriate water supply and a sink/floor drain
 - 3.1.5 Should be well ventilated
 - 3.1.6 Should have suitable lighting

- 3.1.7 Should be easily accessible in relation to the area it serves
- 3.1.8 Should have locks fitted to all doors
- 3.1.9 Should be appropriately sized to the amount of materials, equipment, machinery and chemicals stored in the room/closet and allow for proper ergonomic movement with the room/closet
- 3.1.10 Should never contain personal clothing or grooming supplies, food or beverages
- 3.1.11 Shall have chemical storage that ensures chemicals are not damaged and may be safely accessed
- 3.1.12 Should be free from clutter to facilitate cleaning
- 3.1.13 Should be designed so that, whenever possible, buckets can be emptied without lifting them
- 3.1.14 Personal Protective Equipment (PPE) will be available in each storage area, and on each cleaning cart for the use of each worker.
- 3.1.15 Should have ready access to an eye wash station if chemicals are prepared or poured in this location.
- 3.2 **Cleaning Equipment**: requires attention to avoid cross-transmission of microorganisms and proliferation of microorganisms in dirty environments:
 - 3.2.1 Tools and equipment used for cleaning and disinfection must be cleaned and dried between uses (e.g. mops, buckets, rags)
 - 3.2.2 Mop heads and cloths should be laundered **daily** and dried thoroughly before storage
 - 3.2.3 Cleaning equipment shall be well maintained, clean, and in good repair
 - 3.2.4 Cleaning carts:
 - 3.2.4.1 Should have a separation between clean and soiled items
 - 3.2.4.2 Should never contain personal clothing or grooming supplies, food or beverages
 - 3.2.4.3 Should be thoroughly cleaned at the end of the day
 - 3.2.5 All cleaning products should be appropriately labeled and stored safely
 - 3.2.6 Cleaning agents and disinfectants must be clearly labeled with Supplier or Workplace Labels in accordance with Workplace Hazardous Material Information System (WHMIS), and MSDS must be readily available for each item

- 3.2.7 Automated dispensing systems e.g., a pump, which are monitored regularly for accurate calibration, are preferred over manual dilution and mixing
- 3.2.8 NOTE: If automated dispensing systems are not available in the health facility, measuring cups should be used to ensure proper concentrations. Refer to *FNIHB-OR Environmental Cleaning Procedure Manual*, Section 8. Step-By-Step Procedures.
- 3.2.9 Disinfectants should be discarded after the expiry date
- 3.2.10 Disinfectant bottles should never be topped up
- 3.2.11 Each toilet should have a dedicated toilet brush and container that is discarded weekly, or upon discharge of each person in that room
- 3.3 **Soiled Utility Rooms:** may be used to clean soiled client equipment such as commode chairs. A soiled utility room/workroom should:
 - 3.3.1 Be physically separate from other areas, including clean supply/storage areas/clean linen storage
 - 3.3.2 Be designed to minimize the distance from point-of-care
 - 3.3.3 Have a work counter and clinical sink with hot and cold faucets **if it is being used to clean equipment**
 - 3.3.4 Have a dedicated hand washing sink with both hot and cold running water
 - 3.3.5 Have adequate space to permit the use of equipment required for the disposal of waste
 - 3.3.6 Have PPE available to protect staff during cleaning and disinfecting procedures
 - 3.3.7 Be adequately sized within the health facility
 - 3.3.8 Not be used to store unused equipment.
- 3.4 **Clean Supply Room:** is used to store clean supplies and equipment. A clean supply room/area should:
 - 3.4.1 Be separate from soiled workrooms or soiled holding areas
 - 3.4.2 Be adjacent to usage areas and easily available to health care providers and environmental cleaning personnel
 - 3.4.3 Should have limited access and should not be located in a throughway
 - 3.4.4 Be equipped with a work counter and dedicated hand washing sink if used for preparing client care items

- 3.4.5 Be able to keep supplies free from dust and moisture and stored off the floor
- 3.4.6 Open shelves are acceptable in designated clean storage rooms, including linen storage; however, if mesh-type shelving is used, the bottom shelf should be covered or items stored in clean bins on the shelf to protect items from damage or soiling during cleaning of the floor under the shelves
- 3.4.7 Cleaning should be performed on a regular schedule to remove dust from floors and shelves. Vacuuming with a Hepa filtered vacuum, or damp mopping only is permitted in a supply room where clean and sterile supplies are stored to minimize dust from becoming airborne.
- 3.4.8 Supplies should be rotated "first in, first out" so that the oldest supplies are used first
- 3.4.9 To prevent water damage, no client items, or items that may be damaged with water should be placed under sinks, or other areas with water pipes
- 3.4.10 Items should be removed from shipping boxes before storage to prevent contamination with soil/debris that might be on the packing containers

4 REFERENCES

First Nations and Inuit Health Branch-Ontario Region. (2013). Environmental Cleaning Procedure Manual. Retrieved from https://www2.onehealth.ca

Friedman, C., & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Public Health Ontario. (2013). Environmental Cleaning Toolkit. Retrieved from http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental_Cleaning_Toolkit.aspx

Section 7: Principles of Cleaning and

Disinfecting Environmental Surfaces

Subject: Health Facility Toys

Distribution: All FNIHB Staff

Policy number: 7.14

Issued: **September 2015**

Revised:

1 PURPOSE

1.1 Toys can be a reservoir for potentially pathogenic microorganisms that can be present in saliva, respiratory secretions, feces or other body substances. This enables the possible indirect transmission of illness by way of inanimate objects by behavioral characteristics of children including mouthing of hands and toys, drooling, insufficient hand hygiene, and incontinence.

2 POLICY

2.1 All clients, siblings and families are entitled to clean and safe toys and play equipment that are contained within a health care facility e.g. waiting room areas. All toys must be properly cleaned on a regular basis and after use by each client, or when visibly soiled to prevent the growth and/or transfer of potentially harmful microorganisms between clients and families. Toys should not be shared between children.

3 PROCEDURE

- 3.1 Responsibility for Cleaning
 - 3.1.1 The responsibility for the cleaning of shared toys such as those found in waiting areas, should be assigned to one person who must be trained in effective cleaning procedures.
 - 3.1.2 Toys should be removed from general waiting rooms if an adequate process cannot be established to ensure their **daily** inspection, cleaning and disinfection.
 - 3.1.3 Cleaning products should effectively clean and sanitize toys, yet not be hazardous to children who may mouth such toys.
- 3.2 Toy Design and Storage
 - 3.2.1 All toys used within a health facility setting should:
 - 3.2.1.1 Be smooth, non-porous and able to withstand rigorous mechanical cleaning (i.e. no plush toys)
 - 3.2.1.2 Not retain water (e.g. bath toys)
 - 3.2.1.3 Have parts that can be cleaned

- 3.2.2 Play areas e.g. waiting rooms, that are used by more than one child should have an area for segregation of used toys (e.g. a bin into which children/parents/health care workers can place used toys).
- 3.2.3 Clean toys should be stored in a manner that prevents contamination (e.g. dust and water splatter) and should be clearly marked as clean.
- 3.3 Play Areas and Hand Hygiene
 - 3.3.1 Play areas should have an ABHR station available.
 - 3.3.2 Hand hygiene with ABHR must be supervised by an adult.
 - 3.3.3 Before and after playing with toys, children should be encouraged or assisted to clean their hands with alcohol-based hand rub (ABHR) or at a hand washing sink with soap and water.
- 3.4 Cleaning and Disinfection of Toys
 - 3.4.1 Refer to FNIHB-OR Environmental Cleaning Procedure Manual: Section 8

4 REFERENCES

First Nations Inuit Health Branch-Ontario Region. (2013). Environmental Cleaning Procedure Manual. Retrieved from https://www2.onehealth.ca

Friedman, C., & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

IPAC Canada. (2011). Practice Recommendations: Toys. Retrieved from: http://ipac-canada.org/photos/custom/OldSite/pdf/Toys%20Practice%20Recommendations%202011%20-%20R2014.pdf

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Section 7: **Principles of Cleaning and Disinfecting Environmental Surfaces**

Policy number: **7.15**

~ 1.

Issued: **September 2015**

Subject: Management of Biological Spills

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 Spills of blood and other body substances, such as urine, faeces and emesis, must be contained, cleaned and the area disinfected immediately to prevent the transmission of infectious disease to clients, staff, and visitors within a health facility.

2 POLICY

2.1 All spills of blood and other body substances within a health facility must be contained, properly cleaned and the area disinfected immediately. Staff will be trained in the proper application of personal protective equipment (PPE), and the correct use of chemicals in order to clean and disinfect any spills.

3 PROCEDURE

- 3.1 Responsibility and Reporting:
 - 3.1.1 All health care providers and personnel that are at risk of a blood or body substance exposure, are expected to be immunized and to maintain up-to-date immunization status as outlined in the edition of the Health Canada Occupational Health Assessment Guidelines (OHAG) according to Annex G (Tuberculosis) and Annex O (Recommended Immunizations and Screening Tests Related to Occupational Exposure). (Refer to Policy 1.1: Staff Immunization; Policy 1.2: Staff TST Screening/Assessment).
 - 3.1.2 Non-immunized staff should be offered all recommended immunizations including hepatitis B immunization at no cost to the employee. (Refer to Policy 1.1: Staff Immunization).
 - 3.1.3 If a spill of blood and/or other body substances such as urine, faeces and emesis, occurs, it is the responsibility of the health care provider to notify the environmental cleaning staff immediately to have the spill tended to. If an environmental cleaner is not available it is the responsibility of the health care provider to tend to the spill appropriately and as soon as possible.
 - 3.1.4 All assigned personnel who are cleaning up a biological spill, must be familiar with this procedure as per *FNIHB-OR Environmental Cleaning Procedure Manual*.

- 3.1.5 All staff who clean up a biological spill must wear PPE as required, according to the size and nature of the spill (i.e. gloves, gown, mask with eye protection)
- 3.1.6 Following the cleanup of the spill, the incident should be reported to the NIC and/or appropriate manager and documented, including suggestions for preventing a similar incident in the future.
- 3.2 Cleaning Procedure for Spills on a Hard Surface Floor: Refer to FNIHB-OR Environmental Cleaning Procedure Manual, Section 8.0.
- 3.3 Cleaning Procedure for cleaning a Spill of Blood or Body Substance on Carpet: Refer to FNIHB-OR Environmental Cleaning Procedure Manual, Section 8.0.
- 3.4 Carpeting is discouraged for areas where spills of blood or other body substances may be anticipated (e.g. treatment rooms). Carpeting if used, must be easily removed and replaced (e.g. carpet tiles) if the procedure above is not effective.

4 REFERENCES

First Nations Inuit Health Branch-Ontario Region. (2013). Environmental Cleaning Procedure Manual. Retrieved from https://www2.onehealth.ca

Friedman, C. & Petersen, K. H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Agency of Canada. (2013) Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html

Public Health Ontario. (2012). Routine Practices and Additional Precautions in All Health Care Settings. 3rd Edition. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP_All_HealthCare_Settings_Eng2012.pdf

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best_Practices_Environmental_Cleaning_2012.pdf

Public Health Ontario. (2013). Environmental Cleaning Toolkit. Retrieved from http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Environmental_Cleaning_Toolkit.aspx

SECTION 8: MANAGEMENT OF SINGLE USE AND REUSABLE MEDICAL EQUIPMENT/DEVICES

Section 8: Management of Single Use

and Reusable Medical Equipment/Devices

Issued: September 2015

Policy number: 8.1

Subject: Management of Biological Spills Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 The transmission of infectious agents during invasive procedures is a potential risk to clients and HCPs. Infections related to the improper use and storage of sterile equipment can occur in any health facility that performs invasive procedures. In order to decrease client and HCP risk to such infections, FNIHB – Ontario Region has transitioned to the practice of using sterile **single use** disposable medical equipment/devices (whenever possible) for procedures performed in all FNIHB health facilities. All sterile medical equipment/devices need to be stored, managed and used in a manner that maximizes safety for both clients and health care providers (HCPs).

NOTE: Reprocessing of medical equipment/devices in FNIHB health facilities is no longer carried out with the exception of the FNIHB Dental program that has a separate stand-alone program with specific reprocessing policies and procedures in place.

2 POLICY

2.1 All FNIHB health facilities that perform invasive procedures must ensure that all clean, disinfected, and sterile medical equipment/devices are stored, managed and used in a manner that maximizes safety for both clients and health care providers (HCPs).

3 PROCEDURE

- 3.1 Critical and semi-critical medical equipment/devices labeled as single-use must not be reprocessed and reused. It must only be used once and then discarded and sent back to the vendor for recycling purposes.
- 3.2 Single use medical equipment/devices are usually labeled by the manufacturer with the symbol below:



3.3 Shelf Life of Sterile Package:

- 3.3.1 The shelf life of a sterile package is **event-related** rather than time-related. Event-related shelf life is based on the concept that items that have been properly decontaminated, wrapped, sterilized, stored and handled will remain sterile indefinitely, unless the integrity of the package is compromised (open, wet, dirty).
- 3.3.2 If the integrity of the package is compromised, the item can no longer be sterile and it must be either reprocessed (if applicable) or if a single-use device it must be discarded and sent back to the vendor for recycling.

3.4 Storage Areas for Items:

- 3.4.1 Adequate storage space must be provided to prevent crushing or damage to packages.
- 3.4.2 Overhead pipes, wiring and ducts are enclosed to prevent dust accumulation.
- 3.4.3 Windows and doors must be kept closed where clean and sterile items/devices are stored, except in order to bring supplies into or take them out of the area.
- 3.4.4 Only clean items/devices should be stored with sterile items/devices. However, **clean** and sterile items must be on separate shelves i.e. sterile items stored with sterile items, and clean items stored with clean items to avoid using a non- sterile item when a sterile item is needed.
- 3.4.5 Clean items should not be placed on the designated wire racks that are used for single use sterile medical devices.
- 3.4.6 Items are to be removed from shipping containers in a clean area which is separate from where they are to be stored.
- 3.4.7 Shipping containers are not to be kept where clean and sterile items/devices are stored.
- 3.4.8 Access to the clean/sterile storage areas shall be restricted to persons whose normal responsibilities require them to enter this area.
- 3.4.9 Portable fans and heaters equipped with fans must not be used in storage areas as this increases the likelihood of recirculating dust and micro-organisms from the floor onto work surfaces and potential contamination of devices.
- 3.4.10 Liquids are not to be stored above dry medical devices.
- 3.4.11 Measures need to be in place to protect storage areas from airborne contamination arising from renovations and from construction activities inside the storage facility, and potentially from adjacent areas.
- 3.4.12 Containers used for storage of clean equipment/devices should be moisture-resistant and cleanable (i.e. cardboard boxes must not be used).

- 3.4.13 Equipment/devices are stored in clean, dry, dust-free areas; not at floor level, on window sills, under sinks, or under alcohol or soap dispensers; and are protected from debris, drains, moisture and vermin to prevent contamination.
- 3.4.14 Shelving requirements:
 - 3.4.14.1 Constructed of materials that are non-porous on all surfaces, non-shedding, easily cleanable, and free of burrs and sharp or rough edges
 - 3.4.14.2 Top and bottom shelves shall be solid
 - 3.4.14.3 If open shelving units are used for storage of sterilized medical devices, the shelves should be at least 25 cm (10 inches) off the floor, 46 cm (18 inches) from the ceiling, and 50 cm (2 inches) from an outside wall.
- 3.4.15 Environmental controls must be in place and monitored as per item #5.
- 3.5 Sterile Storage Relative Humidity Requirements
 - 3.5.1 Temperature maintained between 18° C and 23° C
 - 3.5.2 Relative humidity maintained between 30% and 60%. (Occasional incidents when the relative humidity rises to between 60 and 70% are generally not considered cause for concern for the safety of medical devices).
 - 3.5.3 All sterile items in paper packaging must be protected by placing them in impervious covers (heavy zipper type bags) or closed plastic containers to prevent moisture damage (wicking).
 - 3.5.4 Relative humidity exceeding 70% **on an ongoing basis** should be treated as an event that needs an appropriate response and the Zone Nursing Manager must be notified by the Nurse-in-Charge to provide further direction.

3.6 Inventory Management

- 3.6.1 Sterile items in pouches should not be bent or crushed during storage.
- 3.6.2 Frequently used items should be placed in the most strategic area/location on the cart/room for ready access. If items are used together, then store next to each other.
- 3.6.3 An inventory list, with minimum levels for each piece of equipment/tray should be in place.
- 3.6.4 Trays should be carefully stacked on top of each with the oldest dated item at the top.
- 3.6.5 Always use the oldest dated item first so rotation of the items occurs i.e. "first in, first out" principle should be maintained.

- 3.6.6 The stock should be checked once per month by the NIC for the following:
 - 3.6.6.1 Quantities are sufficient to provide adequate service i.e. no stockpiling
 - 3.6.6.2 Packaging is not damaged, opened, wet or punctured i.e. no longer considered to be sterile
 - 3.6.6.3 If an item is not used in 6 months then a review of that item is needed to determine if the item should be removed as a regular stock item.
- 3.6.7 Stock is ordered on a monthly basis to maintain minimum inventory levels as determined and adjusted as needed by NIC.
- 3.7 Cleaning Principles for Storage Area (Refer to *FNIHB-OR Environmental Cleaning Manual* Section 8.0)
 - 3.7.1 Cleaning of clean/sterile storage areas should be carried out in a way that controls dust and excess moisture. No dry dusting of floors or surfaces is permitted.
 - 3.7.2 A schedule of cleaning is defined and documented as per the chart below:

Item	Frequency of Cleaning
Counters	Daily
Open floors	Daily
Shelves	Monthly
Bins used for storage of	Every 3 months
sterile products	
Walls	Every 6 months or more
	often as needed
Lighting fixtures and	Every 6 months
other fixtures	
Floor space beneath cart	Whenever cart is moved
All floors	Annually
	-

- 3.7.1 Vacuum cleaners, if used, shall be equipped with HEPA filters.
- 3.7.2 No dry mopping is permitted in the clean/sterile supply room/area
- 3.7.3 Totes and bins are:
 - 3.7.3.1 To be clean and in good repair
 - 3.7.3.2 To be cleaned before use if visibly soiled
 - 3.7.3.3 Made of a material that is able to be easily cleaned
 - 3.7.3.4 To be wiped down monthly
 - 3.7.3.5 To have reusable covers for protecting devices, carts or containers during transport wiped down monthly

4 REFERENCES

First Nations Inuit Health Branch-Ontario Region. (2013). Environmental Cleaning Procedure Manual. Retrieved from https://www2.onehealth.ca

Friedman, C., & Petersen, K.H. (2004). Infection Control in Ambulatory Care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Ontario. (2010). Infection Prevention and Control Resource Manual for Residential Hospice Settings. Retrieved from http://www.ontla.on.ca/library/repository/mon/25001/307210.pdf

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best Practices Environmental Cleaning 2012.pdf

Public Health Ontario. (2013). Best Practices for Cleaning, Disinfection and Sterilization of Medical Equipment/Devices. 3rd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/PIDAC_Cleaning_Disinfection_and_Sterilization_2013.pdf

Section 8: Management of Single Use

and Reusable Medical Equipment/Devices Policy number: **8.2**

Issued: September 2015

Subject: Disposal of Single Use Medical

Equipment/Devices

Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 The transmission of infectious agents can occur with the improper handling and transporting of single use medical equipment/devices. If soiled/contaminated single use medical devices are not disposed of and handled properly there is an increased risk of exposure/injury to HCPs and clients and/or contamination of the environment. Single use medical equipment/devices (SUD) must be handled in an environmentally-friendly way and transported in a manner which maximizes safety for both clients and HCPs.

2 POLICY

2.1 All FNIHB health facilities that perform invasive procedures must ensure that all single use medical equipment/devices (SUD) are handled, disposed of and transported in a manner that maximizes safety for both clients and health care providers (HCPs).

3 PROCEDURE

- 3.1 Sharps such as needles, lancets, blades and glass cannot be safely cleaned and therefore such items must be SUD.
- 3.2 All sharps must be disposed of by the user in the appropriate puncture-proof Sharps container at the point-of-care.
- 3.3 Once contaminated, SUDs, excluding sharps, must be disposed of in a yellow disposal container (labeled with a biohazard symbol). NOTE: Absolutely <u>no sharps</u> are to be placed in this container.
- 3.4 The SUD disposal container should be located in a designated "dirty" location, away from client-care areas.
- 3.5 Proper personal protective equipment (PPE) must be worn by HCPs in the handling of all contaminated, single-use items for disposal.

- 3.6 All packaging (wrap or plastic pouches etc.) associated with the single-use tray/item can be discarded in the regular garbage. NOTE: Only the SUD itself, and not the packaging, is to be placed into the disposal container.
- 3.7 Following disposal of the contaminated, SUD into the disposal container, disposable gloves are to be removed and hand hygiene performed before leaving the area.
- 3.8 When the disposal container is ³/₄ full, the container is sealed closed with the plastic lid designed for the disposal container.
- 3.9 The environmental cleaner (e.g. caretaker, janitor, housekeeper) then places the disposal container in the biohazard box that is lined with a yellow bag. The box must be clearly labeled MEDICAL WASTE.
- 3.10 The box is taken to the designated clinic area for storage until final pick-up by the contractor.
- 3.11 Transportation of Dangerous Goods (TDG) regulations (including use of appropriate process/forms) must be adhered to, if transporting contaminated devices by air or road. (Refer to Policy 6.1: Collection and Transportation of Laboratory Specimens).

4 REFERENCES

Central Services Association of Ontario. (2009). The Manual for Reprocessing Medical Devices. 1st Edition.

First Nations and Inuit Health Branch-Ontario Region. (2013). Environmental Cleaning Procedure Manual. Retrieved from https://www2.onehealth.ca

Public Health Ontario. (2013). Best Practices for Cleaning, Disinfection and of Medical Equipment/Devices. 3rd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/PIDAC_Cleaning_Disinfection_and_Sterilization_2013.pdf

Public Health Ontario. (2012). Routine Practices and Additional Precautions in All Health Care Settings. 3rd Edition. Retrieved from:

http://www.publichealthontario.ca/en/eRepository/RPAP All HealthCare Settings Eng2012.pdf

Section 8: Management of Single Use

and Reusable Medical Equipment/Devices Policy number: **8.3**

Revised:

Issued: **September 2015**

Subject: Transportation of Reusable

Medical Devices For Off-Site

Reprocessing

Distribution: All FNIHB Staff

1 PURPOSE

- 1.1 There are only a few specific pieces of medical equipment/devices that are not available as single use devices. In order to reprocess these identified items, a contract must be in place with a third party reprocessing facility (e.g. local regional hospital) that practices in accordance with the Canadian Standards Association (CSA) and Provincial Infectious Diseases Advisory Committee (PIDAC) best practices. Reusable medical equipment devices must be handled and transported in a manner which maximizes safety to both HCPs and clients.
- 1.2 Reprocessing of medical equipment/devices in FNIHB health facilities is no longer carried out with the exception of the FNIHB Dental program that has separate stand-alone program with specific reprocessing policies and procedures in place.

2 POLICY

2.1 Whenever possible, single use medical equipment/devices must be used in FNIHB health facilities that perform invasive procedures. However, in the few instances where single use equipment is not available and reusable equipment must be used, the device must be first decontaminated, then handled and transported to an approved third party reprocessing facility in a manner that maximizes safety for both clients and health care providers (HCPs).

3 PROCEDURE

- 3.1 Single-use medical equipment/devices must never be reprocessed. They are for single-use only.
- 3.2 Single-use medical equipment/devices must be used for invasive procedures at all times with the exception of the pieces of equipment listed below.
- 3.3 The following pieces of equipment are not available as single use devices. The reusable medical devices listed below must be transported to an approved third party reprocessing facility. Contracts must be in place to have these items reprocessed by a facility that meets Canadian Safety Association (CSA) standards and PIDAC recommendations for reprocessing reusable medical equipment/devices (e.g. regional hospital facility).

- 3.3.1 Ring cutters
- 3.3.2 Simpson delivery forceps
- 3.3.3 Child and adult intubation McGill forceps (Crash cart)
- 3.4 Process for Preparing Reusable Medical Equipment for Transportation to Third Party Reprocessing Facility:
 - 3.4.1 Each health facility should be aware of the type of container that the third party reprocessing facility requires for transporting the equipment to and from the health facility/reprocessing facility.
 - 3.4.2 When reusable medical devices are used, the identified process as follows must be carried out by the user of the equipment **immediately** following use. This will facilitate timely transportation and reprocessing of the item.
 - 3.4.2.1 Proper personal protective equipment (PPE) i.e. disposable water resistant long sleeve gown, disposable nitrile gloves and a disposable mask with eye protection, must be worn. Note: Prescription eye glasses are **not** considered to be appropriate eye protection.
 - 3.4.2.2 All sharps (needles, blades, clinical glass etc.) must be removed and disposed of in the appropriate puncture-proof sharps container at the point-of-care.
 - 3.4.2.3 All packaging (wrap or plastic pouch) must be removed from the items and disposed of in the regular garbage.
 - 3.4.2.4 Reusable items must be pre-cleaned with an enzymatic cleaner (e.g. Aseptizyme neutral PH of 7) by the HCP in a designated "dirty" (non-client care) area.
 - 3.4.2.5 Each reusable item must be rinsed with clean tap water and dried. Normal saline must not be used for pre-cleaning.
 - 3.4.2.6 Reusable cleaned items are then:
 - 3.4.2.6.1 Wrapped in a disposable blue pad for protection
 - 3.4.2.6.2 Placed in a Tyvek paper bag(s) and sealed closed
 - 3.4.2.6.3 Placed in the covered, fully enclosed container that are designed for this purpose for transport to the reprocessing facility
 - 3.4.2.7 The requisition for reprocessing (Refer to Appendix 48: Documentation for Transportation of Reusable Medical Devices for Off-Site Reprocessing) must be sent with the container to the off-site third party reprocessing facility.
 - 3.4.2.8 Label the box with the container and ship to the reprocessing facility.
 - 3.4.2.9 Place the container in a suitable sized cardboard box to prevent damage to the container during transport.

- 3.5 Once the equipment is received by the reprocessing facility and the items have been reprocessed, it will returned to the health facility with documentation from the reprocessing facility completed in the requisition (Refer to Appendix 48: Documentation for Transportation of Reusable Medical Devices for Off-Site Reprocessing).
- 3.6 If the reprocessing facility identifies concerns with the equipment, they should be addressed by the Nurse in Charge.

4 APPENDIX

Appendix 48: Documentation for Transportation of Reusable Medical Devices for Off-Site Reprocessing

5 REFERENCES

Central Services Association of Ontario. (2009). The Manual for Reprocessing Medical Devices. 1st Edition.

First Nations and Inuit Health Branch-Ontario Region. (2013). Environmental Cleaning Procedure Manual. Retrieved from https://www2.onehealth.ca

Public Health Ontario. (2013). Best Practices for Cleaning, Disinfection and Sterilization in all Health Care Settings. 3rd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/PIDAC Cleaning Disinfection and Sterilization 201

3.pdf

Public Health Ontario. (2012). Routine Practices and Additional Precautions in All Health Care Settings.

3rd Edition. Retrieved from: http://www.publichealthontario.ca/en/eRepository/RPAP All HealthCare Settings Eng2012.pdf

SECTION 9: Post-Mortem Care in the Health Facility

Section 9: **Post-Mortem Care in the**

Health Facility

Policy number: **9.1**

Issued: September 2015

Subject: **Post-Mortem Care in the Health**

Facility Revised:

Distribution: All FNIHB Staff

1 PURPOSE

1.1 There may be occasions when a client dies within a clinic, or health facility or is brought to the health facility post-mortem. Post-mortem care in the health facility includes the basic preparation of the body for transportation to the funeral home or designated place. Principles of asepsis must be maintained while providing care to the deceased to reduce risk of cross contamination of infectious microorganisms to staff, clients and visitors within the health facility, or to the environment.

2 POLICY

2.1 In the event that a client dies within a health facility or is brought to the facility post-mortem, health care providers may be required to provide initial post-mortem care. HCPs must follow Routine Practices at all times to protect themselves from the risk of exposure to blood and body fluids and to minimize the risk of transmission of infectious microorganisms within the health care facility.

Routine practices, properly and consistently applied should be used for handling deceased bodies and preparing bodies for autopsy or transfer to mortuary services.

Airborne precautions should be continued for the handling of a patient with infectious respiratory tuberculosis, measles or varicella until appropriate time has elapsed to remove airborne contaminants in the room... Adhere to provincial/territorial specified communicable disease regulations. (PHAC, p.87)

3 PROCEDURE

- 3.1 General Care of Body:
 - 3.1.1 Perform a risk assessment and observe routine practices while caring for the body after death.

Hand Hygiene	Must be performed before and after contact with the body
Gloves	Must be worn when handling the body
Gown	Must be worn if procedures are likely to generate blood or body fluids
Mask With Eye	Must be worn if there is a risk of splashes or sprays of blood and
Protection	body fluids

3.1.2 If the client was on additional precautions prior to death, refer to the following chart:

Type of Additional Precautions Prior to Death	Type of PPE Recommended
Contact Precautions	Wear gloves. Wear a gown if potential contamination of clothing is anticipated
Droplet Precautions	A mask with eye protection is not necessary unless aerosols are anticipated to be generated during the handling of the body
Airborne Precautions	An N95 Respirator with eye protection is not necessary unless aerosols are anticipated to be generated during the handling of the body, except for tuberculosis, measles, or varicella
Additional Precautions as identified by provincial / federal regulations.	Follow Provincial/territorial specified communicable disease regulations should be followed.

3.2 Care of the Body During an Expected Death:

- 3.2.1 The community physician is generally aware of an expected death in the community. In some communities paramedics will pick up the body and may bring it to the health care facility.
- 3.2.2 The nurse will call the physician to advise of the client's death. The physician will complete the required paperwork.
- 3.2.3 At the family's request, the nurse can remove any invasive lines such as catheter, IV line etc. Dispose of materials in the appropriate waste stream (Refer to Policy 7.12: Management of Waste). The family will arrange for care of the body.
- 3.2.4 For deceased persons with a confirmed, probable, or suspect infectious disease, consider limiting contact with the body in the health care facility. The nurse should advise the family/community of any additional precautions that may be required during contact with the body; particularly if the person was ill with a confirmed or suspected reportable communicable diseases.

3.3 Care of the Body During an Unexpected Death:

- 3.3.1 If an incident occurs e.g., stab wound, severe injury, myocardial infarction etc., the ambulance is called and the client may be brought to the health care facility/nursing station.
- 3.3.2 If the client dies, the community physician and/or coroner is called for directions for further care.

- 3.3.2.1 For investigation purposes, all lines, packing etc. are left in situ (i.e. as is). The body is not cleaned.
- 3.3.2.2 For deceased persons with a confirmed, probable, or suspect infectious disease, consider limiting contact with the body in health care settings.
- 3.3.2.3 The coroner and police will advise in the case that an autopsy is required.

3.4 Transport of Deceased Client

- 3.4.1 The coroner will give directions as to the transport of the deceased client and to arrange for transfer of body to the appropriate facility (funeral home; hospital morgue etc.).
- 3.4.2 Ensure that the deceased is identified with an identification bracelet, name band or tag.
- 3.4.3 Place the body into a body bag (shroud).
- 3.4.4 Where it is known that the deceased had an infectious disease e.g. tuberculosis, Hepatitis B, HIV etc., ensure that this information is given to the police/coroner funeral director and is marked on the body tag.
- 3.4.5 Transport of deceased persons does not require additional precautions when bodies have been secured in a transport bag. Hand hygiene should be performed after completing transport.
- 3.4.6 Place any personal articles belonging to the deceased into a clearly labeled plastic bag and transfer with the deceased body.

3.5 Management of Laundry and Linen

- 3.5.1 Perform hand hygiene and put on disposable gloves.
- 3.5.2 Remove any excessive amounts of fecal material or vomit at the point-of-care with a gloved hand and dispose into toilet. Refer to Policy 7.11: Management of Laundry and Linen.
- 3.5.3 Remove gloves and discard into waste container.
- 3.5.4 Perform hand hygiene.

3.6 **Environmental Cleaning:**

- 3.6.1 Refer to FNIHB-OR Environmental Cleaning Procedure Manual –Section 8.0.
- 3.6.2 Clean and disinfect the room and used equipment as per routine cleaning.
- 3.6.3 Clean and disinfect all equipment and surfaces used in caring for the body prior to death (e.g. stretcher and/or exam table).

- 3.6.4 Remove the plastic bag from the garbage container and discard.
- 3.6.5 Wipe the garbage container with cleaner/disinfectant wipes (e.g. Accel Prevention wipes) and line with a new plastic bag.
- 3.6.6 Clean the floor with an approved cleaner/disinfectant (e.g. Accel Prevention cleaner/disinfectant).

4 REFERENCES

Association for Professionals in Infection Control and Epidemiology. (2009). Text of Infection Control and Epidemiology Volume II Scientific and Practice Elements 3rd Edition; 108:1-5, Washington D.C.

Centers for Disease Control and Prevention. (2009). Post-Mortem Care and Safe Autopsy Procedures for Novel H1N1 Influenza. Retrieved from http://www.cdc.gov/h1n1flu/post_mortem.htm

First Nation and Inuit Health Branch-Manitoba Region. (2010). Infection Prevention and Control Field Manual.

First Nations Inuit Health Branch-Ontario Region. (2013). Environmental Cleaning Procedure Manual. Retrieved from https://www2.onehealth.ca

Public Health Ontario. (2010). Infection Prevention and Control Resource Manual for Residential Hospice Settings. Retrieved from http://www.ontla.on.ca/library/repository/mon/25001/307210.pdf

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care Settings. 2nd Edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best_Practices_Environmental_Cleaning_2012.pdf

Public Health Agency of Canada. (2013). Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html

Recommended Immunizations and Screening Tests Related to Occupational Exposure

As adopted by the OHAG Committee, the table below summarizes recommended work-related immunizations and screening tests for specific groups of federal workers in Canada. Recommended vaccines for work-related risks are marked with an "X". Workers who travel outside of Canada should be offered immunizations, screening tests and prophylaxis as indicated in Appendices A and B of this Annex. These guidelines do not replace professional judgement or individual risk assessments.

All adults should also have immunizations updated as recommended by the National Advisory Committee on Immunization (NACI) in the Canadian Immunization Guide. Immunizations that are not considered to be work-related should be obtained from the provincial/local public health or a treating physician. As per NACI recommendations, individuals who are immunized with hepatitis B vaccine, for work-related purposes, should have a blood test to establish antibody response (i.e. Anti-Hep B Ab titer post-immunization testing), 1-6 months after the 3rd vaccination. If an antibody titer has not been done in the past, it should still be done and, if antibody levels are insufficient, the individual should be boosted once and retested. If still insufficient, 2 more doses will be needed as well as retesting. The individual who does not respond to two courses of Hep B vaccine should be considered a non-responder and will need passive immunization (i.e. Hepatitis B Immunoglobulin - HBIg) after potential exposure.

Immunizations should be given using Safety-Engineered Needles. See link for the PSHP standard: Use of Safety-Engineered Needles for Service Delivery

Legend

- *1 Tuberculin Skin Testing (TST):
 - a) Baseline TST, if indicated, should ideally be done before work related exposure to TB.
 - b) TST is also indicated:
 - i. After known exposure;
 - ii. In the context of a departmental TB program which assesses risk (e.g. conversion rates in the workplace);
 - iii. For travelers to endemic areas, based on an individual risk assessment.
- *2 For workers potentially exposed to blood or other body fluids in search and rescue, first responder situations or as part of law enforcement activities (e.g. armed boarding parties).
- *3 Rabies immunizations IF potentially at risk.
- *4 Hep B vaccination recommended only for CSC employees who have contact with offenders (Correctional Officers, Case Management Officers, Parole Officers, Shop and School Instructors).
- *5 For safety sensitive and emergency positions (e.g. public safety and emergency response capacity).
- *6 For divers who perform rescue tasks.
- *7 If swimming in waters which are potentially contaminated with live polio virus or Hep A (e.g., sewage from international ships on which passengers may have polio or Hep A).
- *8 TST for arctic workers or workers located in communities with endemic TB for extended periods (over 3 months) or significant cumulative exposure.
- *9 Due to closed confined ship community.
- *10 Workers who are expected to be ready to travel overseas at short notice should receive vaccination as soon as possible before leaving (see Appendix A of this Annex). For workers who are expected to travel overseas with advance notice, see Appendix B.
- *11 Hep A is not considered an increased risk. However, the immunization is provided based on an agreement between CSC union and management.
- *12 A Td booster is recommended every 10 years. All adults who have not previously received a dose of acellular pertussis vaccine should receive a single dose of Tdap in place of Td.
- *13 For CCG Rescue Specialists who may have first responder duties on ships with active TB risk.

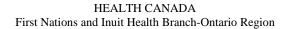
OHAG Section/ Page	Occupation	TST Baseline (2 step, if indicated)	TST During employment	Нер В	Нер А	Polio	Td/ Tdap *12	Rabies	MMR	Influenza	Travel Related Vaccines & Prophylaxis	Other
2-I-1 and 2-I-5	Hospital and Health Services including FNIHB Nurses	X	X*1	Х	X*11 by individual risk assessment for people going to endemic areas		Х	X*3	Х	Х		Varicella
2-II-1	Seagoing Occupations including CCG/ DFO (armed boarding parties, law enforcement activities)	X*13	X*1	X*2	X by individual risk assessment for people going to endemic areas		Х			X*9 ship's crew		
2-II-7	Marine Inspectors						X					
2-II-9	Ice Service Specialists					ā	X			X		
2-II-14	Hydrographers			X*2			X			X*9 ship's crew		10 m
2-III-1	Heavy Equipment and Emergency Vehicle Operators (other than HCWs)						X					
2-IV-1	Employees Exposed to Animals and Animal Tissue, including AAFC Workers						X	X*3				
2-V-1	Fire Fighters			X			X					
2-VI-1	Lighthouse Keepers and Dependants in Medically Isolated Conditions						Х					

OHAG Section/ Page	Occupation	TST Baseline (2 step, if indicated)	TST During employment	Нер В	Нер А	Polio	Td/ Tdap *12	Rabies	MMR	Influenza	Travel Related Vaccines & Prophylaxis	Other
2-VII-1	Shallow Water Divers and Scuba Divers			X*6	X*7	X*7	X					
2-VII-8	Deep Sea Divers			X*6	X*7	X*7	X					
2-VII-10	Snorkelers						X					
2-VIII-1	CSC Employees and Parole Officers	X	X*1	X*4	X*11		X					
2-VIII-4	Fishery Officers	X	X*1	Х			Х	X*3		X*9 for those who travel on ships		
2-VIII-7	Environmental Enforcement/Compliance Officers, including Wildlife Officers			Х			Х	X*3				
2-VIII-10	Border Services Officers CBSA BSO	X	X*1	Х			X		X	X	X*10	Varicella
2-VIII-10	CBSA Employees Performing Enforcement Duties (Inland Enforcement Officers)	Х	X*1	Х			Х	X*3			X*10	Varicella
2-IX-1	Accident Investigation and Rescue Occupations, including Transportation Safety Board (TSB) Investigators and TC Safety Inspectors – Minister's Advisors			X	X employees exposed to airplane sewage		X				X*10	
2-X-1	Dangerous Goods Remedial Measures Specialists and Technical Inspectors						Х					

OHAG Section/ Page	Occupation	TST Baseline (2 step, if indicated)	TST During employment	Нер В	Нер А	Polio	Td/ Tdap *12	Rabies	MMR	Influenza	Travel Related Vaccines & Prophylaxis	Other
2-XI-1	Electrofishers			X*2			X					
2-XII-1	Scientific Personnel-Field	X*8	X*1	X*2			X	X*3		X employees at increased work- related risk (e.g. on ships)	X*10	
2-XIII-1	Health Emergency Response Team (HERT) Members	Х	X*1	Х			Х	X*3	X	Х	X*10	Varicella
2-XIV-1	Quarantine Officers and Environmental Health Officers in a Port of Entry Role	X	X*1	Х	Х	X	X		X	X	X*10	Varicella
2-XV-1	TC Transportation Security Inspectors (TSI)			Х	X		X				X*10	
2-XVI-1	Environmental Emergencies Officers	X	X*1	Х	X		X	X*3			X*10	
2-XVII-1	Physical Emergency Preparedness and Response (PEPR) Workers	Х	X*1	Х	Х		Х	X*3			X	
3-I-1	Isolated and Remote, including dependants	X*8	X*1	X*2	X by individual risk assessment for people going to endemic areas		Х					
3-III-1	Hazardous Exposures/ Laboratory Workers		-				X				!	X lab specific exposure

ANNEX "O"

OHAG Section/ Page	Occupation	TST Baseline (2 step, if indicated)	TST During employment	Нер В	Нер А	Polio	Td/ Tdap *12	Rabies	MMR	Influenza	Travel Related Vaccines & Prophylaxis	Other
3-IV-1	Harsh Environmental Conditions	X*8	X*1				X					
3-V-1	Employees serving abroad, including dependants										X*10	
3-VIII-1	Diplomatic Couriers								_		X*10	
3-IX-1	Posting and Temporary Duty to Afghanistan										X*10	
2-XVIII-1	Rapid Responders										X*10	
Annex S	Biological Labs or Sites containing Chemical Warfare Agents or Radio- Nuclear Agents in former Soviet Union States	Х	X*1			=					X	X lab specific exposure
Bulletin 2012-01	HRSDC Health & Safety Officers/Fire Engineers/Fire Inspectors	X	X*1	X	X		X				X*10	
Bulletin 2003-04	Immunizations for Sewage Workers			X	X		Х					
N/A	Field Epidemiologists										X*10	



PROTOCOL TO MANAGE FEDERAL PUBLIC SERVANTS ACCIDENTALLY EXPOSED TO BLOOD BORNE PATHOGENS (e.g. HBV, HCV, HIV) In The Course of Their Work

This protocol is to provide guidance to departments on the appropriate management of workers occupationally exposed to potentially contaminated blood or body fluids. It has been identified that the likely chance of transmission in a health care facility from a needle stick where the needle is contaminated by blood from a known positive source is low, i.e., approximately 6-30% (60 to 300 in 1000) for Hepatitis B (HBV) virus and approximately 0.3% (3 in 1000) for HIV (Human Immunodeficiency Virus or AIDS virus). The risk is unknown for other occupational settings but is likely lower. The risk of transmission is 1.8% (Range 0-7%) for Hepatitis C (HCV) virus.

Universal precautions are protective when used properly and consistently. There are steps that can be taken to further decrease the risk of transmission upon exposure and this document outlines the current advice. Standard Operating Procedures (SOPs) for work involving exposure to or handling of blood, body fluids or body tissues must include blood precautions or universal precautions.

The protocol must be adapted to local conditions in consultation with Regional Public Service Health Program (PSHP), Health Canada (HC) Professional staff. Departments and different locations within departments will require their own policy and procedures based on this protocol. Departments must liaise with local emergency services providers (e.g. Health Region or hospital or EMS) to arrange services in advance and establish mutually agreeable procedures.

Treasury Board requires departments to have a system in place to respond to emergencies and provide first aid. This includes injuries as discussed in this protocol.

This protocol applies to federal public servants accidentally exposed to blood borne pathogens (e.g., via needle stick injury; attending an accident site; via trauma or cut i.e. razor, while delivering health care or during searches of persons, luggage, cells, personal effects, etc., or in the course of their duties. Examples of such employees are Health Canada, Correctional Services of Canada, First Nations and Inuit Health, Canadian Border Services Agency, Citizenship and Immigration Canada, DFAIT.

- 1. **Immediate first aid** should include making the injury bleed, washing the injured area well with soap and water and removing contaminated clothing. If this is a splash injury to eyes, nose or mouth, flush area well with water (large amounts).
- 2. Reporting: The injury should be reported to the Supervisor or designate who will arrange for the affected person to be immediately assessed at the local medical care facility (medical clinic, hospital) emergency. The exposure will be well documented as with any occupational injury (labour code requirements) including accident report and WCB report. An Infections Disease Specialist Physician will be consulted for assessment of the need for prophylaxis and follow-up. [Where not available another appropriate Specialist Physician or the Medical Officer of Health (MOH) should be consulted.
- 3. The injury will be evaluated by the clinic or hospital physician according to the established provincial or territorial protocol or if a provincial or territorial protocol is not available then according to the following protocol:

June 2010 Q-1

3a. TYPE OF BODY FLUIDS OF VEHICLES OF TRANSMITTING HBV, HCV, OR HIV FROM AN INFECTED INDIVIDUAL INCLUDES:

- Blood, serum, plasma and all biologic fluids visibly contaminated with blood
- Needles, sharps, razors, etc. that have been in contact with the above fluids
- Laboratory specimens containing HBV, HCV, or HIV
- Infected organ donations
- Pleural, amniotic, pericardial, peritoneal, synovial and cerebrospinal fluids (none of these are known to transmit HCV)
- Uterine/vaginal secretions or semen (these are unlikely to be able to transmit HCV)
- Saliva (not known to transmit HCV or HIV, unless contaminated with blood) but could transmit HBV if bite wound is contaminated with blood from a source.

Note: Faeces, nasal secretions, sputum, sweat, tears, urine and vomitus are not implicated in the transmission of HBV, HCV, or HIV unless visibly contaminated with blood.

The risk of transmission from screened donated blood and manufactured blood products for transfusion is low.

3b. To be considered a **SIGNIFICANT EXPOSURE** the injury must come in contact with body fluids capable of transmitting HBV, HCV, or HIV by way of:

- penetration of the injured person's skin, i.e., needle stick or a human-bite, cut with razor or other
- sharp device (e.g., during search of personal effects)
- non-intact skin, i.e., chapped skin or other open dermatological conditions
- mucous membrane, i.e., splash into eyes, nose, mouth

Blood or other fluid capable of transmitting HBV, HCV, or HIV on INTACT SKIN is considered a **NON-SIGNIFICANT EXPOSURE**.

4. If the Treating Physician or Health Care Professional feels this is a **SIGNIFICANT EXPOSURE then** she/he starts prophylaxis. If uncertain whether exposure is significant, he/she will contact the *nearest Infectious Disease Specialist or Medical Officer of Health* for further advice and up to date information regarding *prophylaxis*. Prophylaxis should be *started* within *two hours* to offer the *best chance of preventing HIV transmission*, but can be started later with lesser chance of success.

June 2010 Q-2

5. TESTING OF SOURCE

Every reasonable effort should be made to obtain permission to test the source of HBV, HCV, or HIV. Obtaining informed consent is a mandatory component of pre and post-testing for the Public Servant and for the suspected source person. Testing without consent is not ethical. Maintenance of strict confidentiality of all information is absolutely essential.

After obtaining informed consent the source person should be tested at the time of the injury and again at 6 weeks, 3 months, and 6 months to allow for the "window-period" for HBV, HCV, and HIV. When consent is given to draw blood for testing for all three viruses, the appropriate pre- and post-test counselling for all three blood borne pathogens must be given.

6. POST-EXPOSURE TESTING HCV AND HIV

The exposed employee (after his/her informed consent is obtained) should be tested for HCV and HIV at the time of the injury, at 6 weeks, 3 months, and 6 months following injury. It is recommended that the test be repeated at one year post-injury in the case of HIV if antiretrovirals are used. Other references or sources recommend testing again one year post injury for all cases of possible accidental exposure to HCV or HIV.

When consent is given to draw blood for testing, the appropriate pre- and post-test counselling for all three pathogens must be given.

7. POST-EXPOSURE TESTING AND PROPHYLAXIS FOR HEPATITIS B

If the exposed employee has been immunized against Hepatitis B and has sufficient immunity, (i.e., Anti-HBs results greater than or equal to 10mlU/ml), there is not need to screen the source for HBs and anti-HBs.

If the individual has never been immunized against Hepatitis B, test both the source (after obtaining permission) and the exposed person for HBsAg and anti-HBsAg at the time of injury. Hepatitis B immune globulin (HBIG) should be given within 48 hours of exposure to the unimmunized injured person (employee) and the Hepatitis B vaccine series should begin immediately. Efficacy of HBIG decreases with time and is unknown after 7 days. If the individual has been immunized against HBV and his/her serologic response is unknown, test for anti-HBsAg and restart HBV vaccine series.

HIV POST-EXPOSURE CHEMOPROPHYLAXIS PROTOCOL FOR POSSIBLE EXPOSURE

1. The exposed employee is assessed at the local medical facility (i.e., hospital or medical clinic). If exposure is **SIGNIFICANT**, (see definition above) or if necessary, the local Infection Disease Consultant will be contacted for consultation.

Note: Remote Customs and INHS sites need a more specific document to address their particular situation, i.e., where the HCW (CHN) is also the injured party or no one else is available.

June 2010 O-3

- 2. If antiretroviral treatment is recommended, advice and counselling is provided to the exposed employee as to the relative risks involved and if she/he agrees, the patient is given as prescribed by the physician a 5-day starter kit of appropriate antiviral medication according to degree of risk and current medical practice (maybe 2 or 3 drugs according to exposure). In certain cases, the physician may prescribe the full 28 days of medication rather than the starter kit but follow up assessment(s) by the physician is essential during this period and must be arranged. The patient should also be given information sheets on the medications prescribed. The starter kits must be available within a reasonable time, i.e., 1 to 2 hours or may be obtained from the local hospital pharmacy or emergency department. The employee involved, is instructed to start the antiretroviral drugs immediately if he/she consents.
- 3. The exposed employee should be instructed to see their local community family physician within the first five (5) days of treatment for consultation, counselling and advice. If, at that time, he/she wishes to continue the recommended antiretroviral treatment, the family physician can provide the client with a prescription for the remaining 23-day supply of drugs.
- 4. Further questions and concerns can be discussed with the treating physician, the Infectious Disease Consultant, or the MOH. The Occupational Health Nurse or the Occupational Health Medical Officer may be consulted later for advice and information.

POST EXPOSURE COUNSELLING GUIDELINES FOR ALL EMPLOYEES EXPOSED TO BLOOD BORNE PATHOGENS

For a six month period:

- Abstain from sexual intercourse or use a latex condom with a water-based lubricant at all times during intercourse.
- Pregnancy should be deferred. Medical advice should be sought on whether to continue breastfeeding.
- Do not donate blood, plasma, organs, tissue or sperm
- Do not share toothbrushes or razors or sex toys or needles or other implements which may become contained with bodily fluids.
- 5. Follow up assessments should occur for one year after the exposure as positive tests may occur after 6 months in 5% of positive cases.

Prevention of recurrence:

Manager may consult with PSHP, HC Health Professionals for information and advice on prevention. An assessment of the circumstances of injury should be conducted to identify mechanisms of prevention such as:

- use of universal precautions or blood precautions; use safety needles
- education of children not pick-up/play with discarded needles
- no recapping of needles and dispose of needles/sharps in appropriate containers
- · teaching diabetics and IVDU's where to safety dispose of used needles
- Use at least double gloves during cell searches, luggage searches, personal searches, etc.

June 2010 Q-4

Where possible use a probe(s) to initially search the area of mattresses, bedding, suitcases, boxes, luggage, etc. (safer search techniques should be developed).

6. AVAILABILITY OF MEDICAL ADVICE

PSHP, HC will upon request provide Infectious Disease Information Sessions to managers, supervisors, and employees to assist them in becoming more knowledgeable in infectious disease prevention and in blood or universal precautions.

National Emergency Preparedness and Occupational Health Directorate (EPOHD) and/or Regional PSHP, HC Professional staffs will, upon request, facilitate access to appropriate health/medical services in the area. PSHP, HC will provide advice on the development of appropriate responses, procedures and protocols.

The PSHP, HC professional where necessary, will assist client departments in developing and delivering:

- Education packages to deliver to workers pre-exposure
- Post-exposure counselling guidelines
- Protocol for protective procedures and equipment



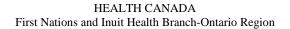


TABLE 1. Recommended HIV postexposure prophylaxis (PEP) for percutaneous injuries

		Infection status of source										
Exposure type	HIV-positive, class 1*	HIV-positive, class 2*	Source of unknown HIV status [†]	Unknown source§	HIV-negative							
Less severe ¹	Recommend basic 2-drug PEP	Recommend expanded ≥3-drug PEP	Generally, no PEP warranted; however, consider basic 2-drug PEP** for source with HIV risk factors††	Generally, no PEP warranted; however, consider basic 2-drug PEP** in settings in which exposure to HIV-infected persons is likely	No PEP warranted							
More severe ^{§§}	Recommend expanded 3-drug PEP	Recommend expanded <u>≥</u> 3-drug PEP	Generally, no PEP warranted; however, consider basic 2-drug PEP** for source with HIV risk factors††	Generally, no PEP warranted; however, consider basic 2-drug PEP** in settings in which exposure to HIV- infected persons is likely	No PEP warranted							

^{*} HIV-positive, class 1 — asymptomatic HIV infection or known low viral load (e.g., <1,500 ribonucleic acid copies/mL). HIV-positive, class 2 — symptomatic HIV infection, acquired immunodeficiency syndrome, acute seroconversion, or known high viral load. If drug resistance is a concern, obtain expert consultation. Initiation of PEP should not be delayed pending expert consultation, and, because expert consultation alone cannot substitute for face-to-face counseling, resources should be available to provide immediate evaluation and follow-up care for all exposures.

TABLE 2. Recommended HIV postexposure prophylaxis (PEP) for mucous membrane exposures and nonintact skin* exposures

	Infection status of source									
Exposure type	HIV-positive, class 1 [†]	HIV-positive, class 2 [†]	Source of unknown HIV status [§]	Unknown source¶	HIV-negative					
Small volume**	Consider basic 2- drug PEP††	Recommend basic 2-drug PEP	Generally, no PEP warranted%	Generally, no PEP warranted	No PEP warranted					
Large volume ^{¶¶}	Recommend basic 2-drug PEP	Recommend expanded <u>></u> 3-drug PEP	Generally, no PEP warranted; however, consider basic 2-drug PEP ^{+†} for source with HIV risk factors ^{§§}	Generally, no PEP warranted; however, consider basic 2-drug PEP ^{††} in settings in which exposure to HIV-infected persons is likely	No PEP warranted					

^{*} For skin exposures, follow-up is indicated only if evidence exists of compromised skin integrity (e.g., dermatitis, abrasion, or open wound).

[†] For example, deceased source person with no samples available for HIV testing.

[§] For example, a needle from a sharps disposal container.

¹ For example, solid needle or superficial injury.

^{**} The recommendation *consider PEP" indicates that PEP is optional; a decision to initiate PEP should be based on a discussion between the exposed person and the treating clinician regarding the risks versus benefits of PEP.

^{††} If PEP is offered and administered and the source is later determined to be HIV-negative, PEP should be discontinued.

[🖇] For example, large-bore hollow needle, deep puncture, visible blood on device, or needle used in patient's artery or vein.

[†] HIV-positive, class 1 — asymptomatic HIV infection or known low viral load (e.g., <1,500 ribonucleic acid copies/mL). HIV-positive, class 2 — symptomatic HIV infection, AIDS, acute seroconversion, or known high viral load. If drug resistance is a concern, obtain expert consultation. Initiation of PEP should not be delayed pending expert consultation, and, because expert consultation alone cannot substitute for face-to-face counseling, resources should be available to provide immediate evaluation and follow-up care for all exposures.</p>

[§] For example, deceased source person with no samples available for HIV testing.

¹ For example, splash from inappropriately disposed blood.

^{**} For example, a few drops.

^{††} The recommendation *consider PEP" indicates that PEP is optional; a decision to initiate PEP should be based on a discussion between the exposed person and the treating clinician regarding the risks versus benefits of PEP.

^{§§} If PEP is offered and administered and the source is later determined to be HIV-negative, PEP should be discontinued.

¹¹ For example, a major blood splash.





Hand Hygiene for Health Care Settings

Based on PIDAC's Best Practices for Hand Hygiene in All Health Care Settings

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

Hand hygiene is the responsibility of the organization and all individuals involved in health care. Hand hygiene is a core element of client/patient/resident safety for the prevention of infections and the spread of antimicrobial resistance. There are two methods of performing hand hygiene:

1. ALCOHOL-BASED HAND RUB (ABHR)

<u>ABHR</u> is the preferred method for decontaminating hands. ABHR is faster and more effective than washing hands (even with an antibacterial soap) when hands are not visibly soiled. ABHRs:

- provide for a rapid kill of most transient microorganisms
- contain a variety of acceptable alcohols in concentrations from 60 to 90%; 70 to 90% is preferred for health care settings
- are not to be used with water
- contain emollients to reduce hand irritation
- · are less time-consuming than washing with soap and water

If running water is not available, use moistened towelettes to remove the visible soil, followed by ABHR

2. HAND WASHING

Hand washing with soap and running water must be performed when hands are visibly soiled. Antimicrobial soap may be considered for use in critical care areas but is not required and not recommended in other care areas. Bar soaps are not acceptable in health care settings except for individual client/patient/resident personal use.

FACTORS THAT REDUCE THE EFFECTIVENESS OF HAND HYGIENE

The following factors reduce the effectiveness of hand hygiene:

Condition of the skin: See PIDAC's Best Practices for Hand Hygiene in All Health Care Settings, Section 4, "Hand Care", for information about maintaining skin integrity.

Nails: Long nails are difficult to clean, can pierce gloves and harbour more microorganisms than short nails. Nails must be kept clean and short.

Nail polish: Only nail polish that is fresh and free of cracks or chips is acceptable.

Artificial nails or nail enhancements are not to be worn by those giving care.

Jewellery: Hand and arm jewellery hinder hand hygiene. Rings increase the number of microorganisms present on hands and increase the risk of tears in gloves. Arm jewellery, including watches, should be removed or pushed up above the wrist before performing hand hygiene.

Products: Products must be dispensed in a disposable pump container that is not topped-up, to prevent contamination.



Your 4 Moments for Hand Hygiene

Before initial client/patient/ resident or environment contact

When? Clean your hands when entering a room:

- before touching client/patient/resident
- before touching any object or furniture in the client/patient/resident's environment

Why? To protect the client/patient/resident and their environment from harmful germs carried on your hands.

2 Before aseptic procedure

When? Clean your hands immediately before any aseptic procedure.

Why? To protect the client/patient/resident from harmful germs, including his/her own germs, entering his or her body.

3 After body fluid exposure risk

When? Clean your hands immediately after an exposure risk to body fluids (and after glove removal).

Why? To protect yourself and the health care environment from harmful client/patient/resident germs.

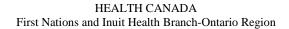
After client/patient/resident or environment contact

When? Clean your hands when leaving:

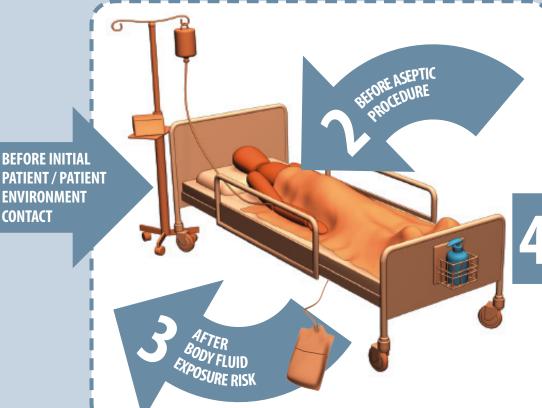
- · after touching client/patient/resident or
- after touching any object or furniture in the client/patient/resident's environment

Why? To protect yourself and the health care environment from harmful germs.





Your 4 Moments for Hand Hygiene



AFTER
PATIENT / PATIENT
NOTE: ENVIRONMENT
CONTACT

BEFORE initial patient / patient environment contact

WHEN? Clean your hands when entering:

• before touching patient or

• before touching any object or furniture in the patient's environment

WHY? To protect the patient/patient environment from harmful germs carried on your hands

BEFORE aseptic procedure

WHEN? Clean your hands immediately before any aseptic procedure

WHY? To protect the patient against harmful germs, including the patient's own germs, entering his or her body

AFTER body fluid exposure risk

WHEN? Clean your hands immediately after an exposure risk to body fluids (and after glove removal)

WHY? To protect yourself and the health care environment from harmful patient germs

AFTER patient / patient environment contact

WHEN? Clean your hands when leaving:

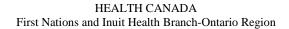
after touching patient or

• after touching any object or furniture in the patient's environment

WHY? To protect yourself and the health care environment from harmful patient germs

Adapted from WHO poster "Your 5 moments for Hand Hygiene," 2006





Rub hands for 15 seconds



Apply 1 to 2 pumps of product to palms of dry hands.



Rub hands together, palm to palm.



Rub in between and around fingers.



Rub back of each hand with palm of other hand.

Rub hands for 15 seconds



Rub fingertips of each hand in opposite palm.



Rub each thumb clasped in opposite hand.



Rub hands until product is dry. Do not use paper towels.

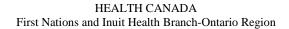


Once dry, your hands are safe.





Catalogue No. CIB-2152924 30M Jan/08 @ Queen's Printer for Ontario





Wet hands with warm water.



Apply soap.

Lather hands for 15 seconds



Lather soap and rub hands palm to palm. and around fingers.



Rub in between

Lather hands for 15 seconds



Rub back of each hand with palm of other hand.



Rub fingertips of each hand in opposite palm.



Rub each thumb clasped in opposite hand.



Rinse thoroughly under running water.



Pat hands dry with paper towel.



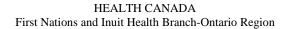
Turn off water using paper towel.



Your hands are now safe.







Santé

Canada

Hand hygiene reduces the risk of infection spread by health care providers. Clean hands are the single most important factor in preventing the spread of pathogens and antibiotic resistance in healthcare settings.

This hand hygiene self assessment tool provides an opportunity for each health care provider to monitor their own hand hygiene practices and to look at ways to improve these practices.

HAND HYGIENE SELF ASSESSMENT TOOL

Always
Mostly
Sometimes
Never

ITEM TO BE MONITORED

1.0	GENERAL OBSERVATIONS		 	
1.1	My nails are short, clean and free from chipped nail polish			
1.2	Artificial nails or gel nails are not worn when giving direct care to a client			
1.3	My skin appears healthy, with no cracks or irritation			
1.4	I refrain from wearing hand jewellery, except for a simple wedding band			
1.5	I do a risk assessment before undertaking tasks so that I can initiate hand hygiene at the proper times as per hand hygiene best practices			
1.6	Any cuts on my hands are covered with a waterproof dressing			
1.7	I am aware of when to use alcohol based hand rub and when to use soap and water			
2.0	HAND HYGIENE METHODS			
2.1	I understand and apply the four moments of hand hygiene in my daily practice			
2.2	I understand when to perform hand hygiene when donning and removing PPE			
2.3	I ensure the skin integrity of my hands by applying hand lotion			
2.4	I know and follow the appropriate technique for using alcohol based hand rub or soap and water			
2.5	I remove all hand jewellery and wrist jewellery, or push it above my wrist, prior to performing hand hygiene			
3.0	EDUCATION			
3.1	I regularly update my hand hygiene knowledge through training provided or journal reading			
3.2	I am aware of the policies on hand hygiene that are applicable to my practice			

page 1 of 2



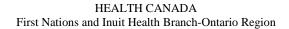


HAND HYGIENE SELF ASSESSMENT TOOL

implement in your current practice.
I have identified the following gaps in my practice:
My plans to address these gaps are:
Education I will need to meet these gaps are:

After completing this assessment, please review your answers and reflect on changes that you can

Reference: PIDAC. Best Practices for Hand Hygiene in All Health Care Settings. December 2010.



Assessment Tool for Health Care Provider* Hands

This form is intended for use to identify hand skin problems so that a proactive approach is used to protect hands from skin breakdown.

It is intended for use:

- a) At the initial assessment of hands of new health care providers
- b) For assessment of hands of employed health care providers (e.g., this can occur with TB skin testing, fit testing or other mandated programs)
- c) For those who have developed skin problems

Name:			Date:
Birthdate:	Telephone:	Job Title:	Employee Number:
Department:		Number of years in current	position:

Health care provider† is to complete Sections 1, 2, 3, prior to Occupational Health assessment

Section 1

Assessment	Yes	No			
Do you have healthy hands with intact skin that are free of irritation at all times? If answer is "no" please continue questionnaire. If answer is "yes" proceed to Section 2.					
What climate conditions adversely affect your hands? ☐ Dry ☐ Humid ☐ Cold ☐ Hot					
Do you have a chronic or recurrent skin condition (e.g., eczema, psoriasis, hives)? If yes, provide details.					
Do you have a history of allergies? If yes, please specify type, onset period and symptoms.					
Are you asthmatic?					
List any medications being used (oral and topical – e.g., steroid cream):					



- * The Ministry of Health and Long-Term Care acknowledges St. Michael's Hospital and the provincial hand hygiene pilot hospitals for their active participation in developing this material and the WHO World Alliance for Patient Safety for sharing their "Clean Care is Safer Care" materials.
- † Any person who delivers care to a patient or works within the patient environment or is involved in food handling (examples but not all inclusive are physicians, nurses, respiratory therapists and other allied health care professionals; cleaning staff; food services staff).



Section 1 (cont'd)

Assessment	Yes	No
Do you have non-work-related activities likely to cause damage to your hands? Example:		
Gardening (if yes, provide details)		
W 1		
Mechanics (if yes, provide details)		
Taking care of small children (if yes, provide details)		
Hands frequently in water and detergents (if yes, provide details)		
Smoking outdoors (if yes, provide details)		
Don't usually wear gloves in the winter (if yes, provide details)		
List any other activities and provide details:		
Have you a history of work involving "wet work or wet gloves"?		
If yes, provide details.		
Do you use a protective hand lotion/cream?		
a) At home? \Box Greater than 5 times/day \Box 2-5 times/day \Box 1/day \Box Rarely \Box Never		
b) At work? Greater than 5 times/day 2-5 times/day 1/day Rarely Never		
Section 2		
Evaluation of Frequency of Hand Hygiene Practices		
Average number of hours worked per week:		
For how long have you been using alcohol-based hand rub at work? It's the first time Less than 1 year Greater than 1 year/less than 5 years Greater than 5 year	agre	

Hand Cleaner (Please indicate all used)			Number of times/day	Number of months used
Alcohol-based hand rub			□ 0-5 □ 6-10 □ 11-20 □ Over 20	
Water and antimicrobial soap			□ 0-5 □ 6-10 □ 11-20 □ Over 20	
Water and liquid/foam/gel non-antimic	robial soap		□ 0-5 □ 6-10 □ 11-20 □ Over 20	
Water only			□ 0-5 □ 6-10 □ 11-20 □ Over 20	
Brush			□ 0-5 □ 6-10 □ 11-20 □ Over 20	
Antimicrobial impregnated sponge			□ 0-5 □ 6-10 □ 11-20 □ Over 20	
How many times do you wash/clean yo □ 0-5 □ 6-10 □ 11-20 □ Greater t		working day?		
Did you receive workplace training on	how to protect and	l care for your skin?	☐ Yes ☐ No	
Exposure Assessment				
•				
Gloves (please indicate which glove type	es you use):			
□Latex	☐ Powdered	□ Non-powdered		
□Vinyl	☐ Powdered	☐ Non-powdered		
□ Nitrile	\square Powdered	\square Non-powdered		
\square Glove liners (plastic/vinyl)	\square Powdered	\square Non-powdered		
☐ Glove liners (cotton)				
☐ Other, please specify:				
Section 3				
Evaluation of Skin Condition				
Self-assessment of the skin on hands: Appearance (supple, red, blotchy, rash) Intactness (cracks, open areas) Moisture content (dryness) Sensation (itchy, burning, soreness)	☐ Abnorma ☐ Abnorma ☐ Abnorma ☐ Abnorma	al Normal al Normal		
How would you assess the overall heal	th of the skin on yo	our hands? 🗌 Very ba	d □Good □Perfect	

Occupational Health Professional to complete Sections 4, 5, 6 & 7

Section 4

Objective Evaluation of Skin Condition by the Occupational Health Professional $Check\ box\ reflecting\ skin\ condition\ at\ the\ date\ observed.$

Dates			
Normal			
Dryness:			
Mild			
Moderate			
Severe			
Abnormal			
Identify size and area of	irritated skin:		

Section 5

Section 6

Further questions to be asked if there is any hand skin irritation.

Assessment	Yes	No
List any chemical exposures to hands including cosmetic products that may be an irritant:		
Are you exposed to any new products at the workplace? (This could be chemicals or materials being used.) If yes, list what they are.		
Has your job or work done as part of your job changed recently? If yes, what?		
Have there been any changes in the hand hygiene products used in the workplace? If yes, list.		
Does the dermatitis improve after being away from work (i.e., improves on days off and becomes worse when working)?		
Have you changed any personal care products at home such as soap, lotions, sunscreen, laundry detergent/softening agents, etc.? <i>If yes, list.</i>		
Have you done anything different outside of work recently (e.g., yard work, travel, hiking, contact with poison ivy)?		

Section 7

Outline Action Plan	Yes	No
List recommendations:		
a) Work restrictions		
b) Hand care counseling		
c) Was a referral made? If yes, where?		
If was note that if this is weak polated demostitis WCID is to be notified		
If yes, note that if this is work-related dermatitis, WSIB is to be notified. Was notification done? www.wsib.on.ca		
d) Other, list:		
tr) Other, list.		
Follow-up visit date, if indicated:		
Tonow-up visit date, if indicated.		

For further information on assessment and management go to Workplace Safety & Insurance Board at: www.wsib.on.ca $\,$

Checklist for Placement of Dispensers

Number	Product(s) and Criteria	Yes	No	Comments
	Hand Hygiene Product Dispensers - Soap, Lotions			
1.0	Dispensers are within easy reach without obstruction			
2.0	Dispensers are placed to minimize splashing or dripping onto adjacent wall and floor surfaces			
3.0	Dispensers are placed to prevent splash-up contamination			
4.0	Dispensers are clearly labeled and easily distinguishable from each other			
5.0	Liquid dispensers are dispensed in non-refillable bottles			
	ABHR Dispensers			
1.0	ABHR are placed at point of care except where client safety could be put at risk.			
2.0	ABHR dispensers are not placed at, or adjacent to, hand washing sinks			
3.0	ABHR dispensers are mounted on the external wall immediately adjacent to the entrance to each client care area, unless contraindicated by the risk assessment			
4.0	ABHR dispensers are available immediately adjacent to the entrance to every health care area unless contraindicated by fire guidelines (e.g., pressurized foam products) (Refer to PIDAC Hand Hygiene Document p. 31)			
5.0	Dispensers should be placed so that they minimize splashing or dripping onto adjacent wall or floor surfaces			
5.0	ABHR dispensers are not installed over or directly adjacent to an ignition source such as an electrical outlet or switch, or over carpeted areas			
6.0	In the health care area, the responsibility for replacing dispenser of ABHR (who and when) are clearly delineated			
7.0	Placement of ABHR facilitates hand hygiene when donning and doffing personal protective equipment (PPE) and ensures compliance with best practices			
8.0	ABHR should be dispensed in a non-refillable bottle			

Adapted from Best Practices for Hand Hygiene In All Health Care Settings. (2014). p. 31; http://www.publichealthontario.ca/en/eRepository/2010-12%20BP%20Hand%20Hygiene.pdf

Placement Tool for Hand Hygiene Products

Related documents:

Your 4 Moments for Hand Hygiene – Training Presentation

Your 4 Moments for Hand Hygiene - Pocket Card

Hand Care Program – Product selection matters on page 2.

To see sample photos of hand hygiene products at point of care please check our website at: www.justcleanyourhands.ca



Overview:

There are two ways to clean your hands, alcohol-based hand rub (ABHR) or soap and water. A key requirement to improve hand hygiene compliance is to provide cleaning products where busy health care providers can clean their hands without leaving the patient.

When hands are visibly soiled, soap and water is the only way to clean. Sinks make it easy to determine placement for soap dispensers. The *Just Clean Your Hands* Hand Care Program provides guidance on the right type of soap and the importance of good quality paper towels. However, sinks are not always convenient and are often not located close to where patient care is provided.

Cleaning hands using ABHR provides facilities with the ability to place a cleaning product directly at the point of care. Simply put, the point of care (POC) is where three elements are present at the same time:

- the patient
- the health care provider
- care involving contact is taking place

Providing ABHR at the point of care makes it easier for health care providers to clean their hands the right way at the right time. However, determining the "right place" for placement of ABHR rubs will differ by unit, patient population group and facility design. This tool will help you to identify the best locations for placement of ABHR.





Placement Checklist Form a point of care assessment team which includes representation from the hand hygiene implementation committee, front-line health care providers and content experts: • Occupational Health and Safety: Address placement of dispensers in relation to health care provider safety, ergonomic, common workflow patterns and common injuries. Consider fire hazard and ignition concerns. • Risk Management/Quality and Patient Safety: Address risks to patients and/or visitors with respect to injury, or ingestion of product. Consider fire hazard and ignition concerns. • Housekeeping: Assess product leakage/spill issues and develop a maintenance process that involves monitoring, replenishing and cleaning the dispensers. • Environmental services/facilities: Assess installation procedures and maintenance of dispensers. • Unit based health care providers: Consider the common workflow in the patient environment, and provide input on the most convenient location for ABHR. Front-line workers from the area where the installation will occur including: • nurses physicians • allied health professionals • personal care assistants management • transporters • Purchasing: Source the best product selection to address identified needs. • Infection Control Professionals: Consider workflow and product interactions with personal protective equipment. Notes: To prepare for workflow assessment, first review Just Clean Your Hands Your 4 Moments for Hand Hygiene

Z.	training presentation and product selection component of the Just Clean Your Hands Hand Care Program.
	Notes:
3.	Verify local fire regulations regarding placement of ABHR. Consultation with the Fire Marshall may be required regarding placement and storage decisions related to alcohol-based hand rub.
	Notes:

4.	Conduct a local risk assessment related to placement of ABHR dispensers in patient care areas. Care should be taken to avoid direct access to ABHR for patients who are not of the mental capacity to realize the negative effects of ingestion or misuse of any kind. Consider:
	• patient population
	• dispensers protruding in a way that could cause injuries
	• product leaking on surfaces causing falls or other injuries
	Notes:
5. \Box	Identify locations which will provide the best access to product at point of care (e.g., within an arm's reach to where patient contact is taking place).
	• Observe and discuss common workflow patterns of nurses, physicians, allied health professionals, transporters and others providing direct patient care or working within patient care areas.
	• List all of the places where "hands on care" is provided (e.g., patient room and areas such as the hallway, at entry to nursing station, inpatient/visitor lounge, clinic areas, assessment and treatment rooms, diagnostic imaging).
	• Consider workflow patterns in relation to:
	 glove placement glove waste disposal on which side of the bed most care is provided access to product when the privacy curtain is pulled
	• Ensure ABHR is not placed at or adjacent to sinks.
	Washing hands with soap and water followed by immediate use of ABHR is not recommended.
	• Prevent esthetic damage to surfaces surrounding the dispenser.
	Notes:
6. \square	Identify best location for hand lotion dispensers. Should be placed so that it is easily accessible to encourage frequent use.
	Notes:

7. \Box	Verify placement recommendations of all hand care products (ABHR, lotions and soaps) will meet the Occupational Health and Safety recommendations such as:
	• dispensers are easily visible
	• within easy reach without unobstructed access
	• placed at the optimal height
	• easy to activate
	• clearly labeled
	Notes:
Ω	Identify responsibilities for:
0	• Procurement
	• Installation of dispensers in identified places
	Ongoing functional maintenance of dispensers
	• Ongoing cleaning of dispensers and replacing empty product in a timely manner. It is critical that dispensers are maintained so that they are functional and have product in them (e.g., could consider a system to indicate (flag) when the product requires replacement or a label identifying where to call for more product).
	Notes:
9.	Testing phase to verify placement is correct. A temporary means of securing the dispensers for the trial period to test the positioning to verify it is in the correct place. Secure the dispensers once the front-line health care providers confirm that the placement is correct for workflow patterns.
	Notes:
10.	Develop an ongoing verification that the hand hygiene system is effective and maintained. Consider a method such as Occupational Health and Safety Audits to verify hand hygiene system is maintained to support healthy hands while improving compliance.
	Notes:

Catalogue No. CIB-2152544 1M Jan/08 © Queen's Printer for Ontario

Routine l	Practices to be used with ALL CLIENTS
YJJ	Hand Hygiene Hand hygiene is performed using alcohol-based hand rub or soap and water: V Before and after each client contact V Before performing invasive procedures V Before preparing, handling, serving or eating food V After care involving body fluids and before moving to another activity V Before putting on and after taking off gloves and other PPE V After personal body functions (e.g., blowing one's nose) V Whenever hands come into contact with secretions, excretions, blood and body fluids V After contact with items in the client's environment
	Mask and Eye Protection or Face Shield (based on risk assessment) √ Protect eyes, nose and mouth during procedures and care activities likely to generate splashes or sprays of blood, body fluids, secretion or excretions. √ Wear within two metres of a coughing client/patient/resident.
	Gown (based on risk assessment) V Wear a long-sleeved gown if contamination of skin or clothing is anticipated.
	Gloves (based on risk assessment) √ 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. √ Remove immediately after use and perform hand hygiene after removing gloves.
	Environment and Equipment V All equipment that is being used by more than one client must be cleaned between clients. V All high-touch surfaces in the client's room must be cleaned daily.
The state of the s	Linen and Waste √ Handle soiled linen and waste carefully to prevent personal contamination and transfer to other clients.
	Sharps Injury Prevention ∨ NEVER RECAP USED NEEDLES. ∨ Place sharps in sharps containers. ∨ Prevent injuries from needles, scalpels and other sharp devices. ∨ Where possible, use safety-engineered medical devices.
B Section 1	Patient Placement/Accommodation ∨ Use a single room for a client who contaminates the environment. ∨ Perform hand hygiene on leaving the room.

Source: PIDAC: Appendix E: Routine Practices and Additional Precautions in All Health Care Settings, November 2012, p. 63

ROUTINE PRACTICES RISK ASSESSMENT TOOL

SOME QUESTIONS TO ASK YOURSELF PRIOR TO EACH INTERACTION

- 1. Does the client appear to be feeling unwell?
- 2. Has the client been diagnosed with an infection?
- 3. Does the client have any symptoms of an infection (coughing, sneezing, fever, diarrhea, vomiting, rash, draining wound, general malaise, confusion, redness, swelling or pain in a specific body area)?
- 4. What contact am I going to have with the client?
- 5. What task am I going to perform? How competent/experienced am I in performing the task?
- 6. What is my risk of exposure to blood, body fluids, respiratory secretions, excretions, non-intact skin, mucous membranes, body tissues, and contaminated equipment?
- 7. Will the client be cooperative while I perform the task?

AFTER THE RISK ASSESSMENT HAS BEEN COMPLETED

Use all appropriate strategies of **Routine Practices** listed below to reduce the transmission of microorganisms (* based on risk assessment). (See Section 4.0 A: Routine Practices)

- Hand hygiene
- Gloves*
- Mask, Eye Protection, or Face Shields*
- Gowns*
- Environment
- Linen and Waste
- Sharps Injury Prevention

REFERENCE: Public Health Ontario, Infection Prevention and Control Reference Tool For Care Providers in the

Community. P. 5

June 15, 2012

REPORTABLE DISEASES LIST

The following diseases are specified as reportable as per Ontario Regulation 559/91 under the Health Protection and Promotion Act (HPPA). NOTE: In the case of an outbreak involving any of the diseases listed below, please contact the zone CDC nurse who will contact the appropriate Zone Medical Officer for instructions.

NOTE: Diseases in **bold** need to be reported to the zone CDC nurse immediately via telephone.

Acquired Immunodeficiency Syndrome (AIDS) - including HIV

Acute flaccid paralysis

Amebiasis

Anthrax

Botulism

Brucellosis

Campylobacter enteritis

Chancroid

Chickenpox (Varicella)

Chlamydia trachomatis infections

Cholera

C. difficile associated disease (CDAD)

outbreaks in public hospitals

Creutzfeld-Jakob Disease, all types

Cryptosporidiosis

Cyclosporiasis

**Diphtheria

Encephalitis, including:

- 1. Primary, viral
- 2. Post-infectious
- 3. Vaccine-related
- 4. Subacute sclerosing panencephalitis
- 5. Unspecified

Food poisoning, all causes

Gastroenteritis, institutional outbreaks Giardiasis, except asymptomatic cases

Gonorrhea

Group A streptococcal disease, invasive Group B streptococcal disease, neonatal

Haemophilus influenzae b disease, invasive

Hantavirus Pulmonary Syndrome Hemorrhagic fevers, including:

- 1. Ebola virus disease
- 2. Marburg virus disease
- 3. Other viral causes

Hepatitis, viral

- 1. Hepatitis A
- 2. Hepatitis B
- 3. Hepatitis C

HIV (see AIDS above)

Influenza

Lassa Fever Legionellosis

Leprosy

Listeriosis

Lyme Disease

Malaria

**Measles

Meningitis, acute

- 1. Bacterial
- 2. Viral
- 3. Other

Meningococcal disease, invasive

**Mumps

Ophthalmia neonatorum

Paralytic shellfish poisoning

Paratyphoid Fever

**Pertussis (Whooping Cough)

Plague

Pneumococcal disease, invasive

**Poliomyelitis, acute

Psittacosis/Ornithosis

Q Fever

Rabies

Respiratory infection outbreaks in institutions

**Rubella

Rubella, congenital syndrome

Salmonellosis

Severe Acute Respiratory Syndrome (SARS)

Shigellosis Smallpox

Syphilis

*Tetanus

Trichinosis

Tuberculosis

Tularemia

Typhoid Fever

Verotoxin-producing E. coli infection indicator conditions, including Hemolytic Uremic Syndrome

West Nile Virus illness

Yellow Fever Yersiniosis

^{*}Diseases for which a clinical diagnosis alone is sufficient to confirm cases for reporting purposes.

^{**}Diseases for which clinically compatible signs or symptoms AND an epidemiological link to a lab-confirmed case is sufficient to confirm cases for reporting purposes.

Initial Decision-making for Those Presenting with ARI

Screening Treatment/Precautions Do you have a new/worse cough or shortness of Initiate care using Routine Practices lo to either* or both breath? Are you feeling feverish? Ask patient to: Clean his/her hands Yes to both questions* Wear mask while waiting to be seen, if tolerated Wait in separate area if possible or keep two metre distance from other patients/HCWs Yes to both questions* Assessment Postpone elective procedures that generate droplets **Initiate appropriate Droplet and Contact** (e.g., dental care) Precautions (hand hygiene, facial protection, gloves +/- gown) Use appropriate precautions if the procedure is required (i.e., non-elective) Travel risk assessment: Have you travelled in the last 14 days? If so, where? ** Have you had contact with a sick person who has travelled in the last 14 days? Where did the person travel? Yes to either travel question Reporting Report immediately to public health by phone when there is a case with a positive travel history to a country with a travel health notice and/or a possible cluster of acute respiratory infections

^{*}Elderly people and people who are immunocompromised may not have a febrile response to a respiratory infection, so the presence of new onset cough/shortness of breath may be enough to trigger further precautions. HCP should maintain an increased awareness that, during influenza season, individuals presenting with acute cardiopulmonary illnesses or asthma in the absence of symptoms or respiratory infection may have influenza. ** For a current list of travel health notices, see: http://www.phac-aspc.gc.ca/tmp-pmv/pub-eng.php.

Appendix B: Sample Form for Active Case Finding of Acute Respiratory Infection on Entry to Health Care Settings

Case Finding/Surveillance Questionnaire for Acute Respiratory Infection
(i) Do you have new/ worse cough or shortness of breath?
\square If 'no', stop here (no further questions)
\square If 'yes', continue with next question
(ii) Are you feeling feverish*, or have you had shakes or chills in the last 24 hours?
\square If 'no', take temperature; if >38° C, continue with next questions, otherwise stop (no further questions)
\square If 'yes', take temperature and continue with next questions
*NOTE: Some people, such as the elderly and people, who are immunocompromised, may not develop a fever.
If the answer to both questions (i) and (ii) is 'yes', or if the answer to question (i) is 'yes' and the recorded temperature is >38° C, initiate Droplet and Contact Precautions and notify Infection Prevention and Control
(iii) Is either of the following true?
\square Have you traveled within the last 14 days? Where**? or
☐ Have you had contact in the last 14 days with a sick person who has traveled? Where**?
**For a current list of Public Health Agency of Canada travel health notices, see: http://www.phac-aspc.gc.ca/tmp-pmv/pub-eng.php For additional information please consult with your local public health unit.
Infection Prevention and Control should notify Public Health by phone when case has a positive travel history and/or there is a possible cluster/outbreak.

Appendix C: Sample Signage for Passive Case Finding of Acute Respiratory Infection at Entrance to Health Care Facilities

NOTE: All signs posted in a health care setting should be translated into all languages that are predominant/common within the community.



Read Carefully

Do you have a NEW or WORSE cough or shortness of breath?

Are you feeling feverish?

If the answer to these questions is **YES** and **you are a patient**:

Clean your hands

AND

If you have a cough, put on a mask or use a tissue to cover your mouth while coughing

AND

Tell the receptionist or nurse right away

Elements That Compromise Droplet and Contact Precautions for Acute Respiratory Infection (in addition to **Routine Practices**)

Element	Acute Care	Complex	Long-	Ambulatory/Clinic	Home Health	
Element	ricate care	Continuing Care	term Care	Setting	Care	
Accommodation	Door may be oper	_		.	Not Applicable	
	Single room	Patient/resident t	o remain in	Triage	1	
	with dedicated	room or bed spac	e if feasible,	client/patient		
	toilet and	or wear a mask (if	tolerated) if	away from		
	patient sink	coughing or sneez	ing within	waiting area to a		
	preferred	two metres of oth	er patients,	single room as		
		until no longer inf	ectious	soon as possible,		
				or maintain a		
				two-metre		
				spatial		
				separation	-	
	Cohorting of	Draw privacy curt	ain	Patient to wear		
	those who are			a mask for		
	laboratory-			duration of visit		
	confirmed to			and perform		
	have the same			hand hygiene		
	infectious agent					
	may be					
	acceptable Remain in room					
	unless required					
	to leave for					
	diagnostic					
	therapeutic or					
	ambulation					
	purposes					
Signage	Yes				Not applicable	
Facial Protection	Within two metre	s of client/patient/	resident		, ,	
(mask and visor/						
goggles)						
Gloves	For all activities in	ties in the room/bed space For direct care				

Santé

Canada

FIRST NATIONS AND INUIT HEALTH ONTARIO REGION - PUBLIC HEALTH UNIT

INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE: PROTOCOL

Background

Since the SARS outbreak in 2003 and, more recently, the influenza A/H1N1 outbreak that affected many countries around the world, including Canada, there has been considerable attention given to the need for effective surveillance of influenza-like illness to facilitate early detection of infectious agents with pandemic potential. It is also a recommendation of the Ontario Ministry of Health and Long-term Care to conduct ongoing active and/or passive surveillance of febrile respiratory illness in health care settings.¹

Thus, in 2006, a surveillance system was implemented in First Nations (FN) communities in the Ontario region to provide early identification of new and/or re-emerging respiratory diseases with pandemic potential. Method A was developed for FNs communities with primary care facilities (e.g. nursing station) located on-reserve to identify cases of influenza-like illness (ILI). Method B was developed to monitor illness-related school absenteeism as a proxy measure of influenza activity within FNs communities without primary care facilities. Method B was discontinued in April 2009 as a result of low yield in terms number of events (i.e. outbreaks) identified, poor data quality, and inconsistent follow-up and reporting, but was re-implemented in October 2009 as the School Absenteeism Monitoring System.

The ILI system is still limited to communities with primary care facilities located on reserve, for ease of identifying ILI cases. The program consists of nurses in nursing stations monitoring and tracking the total number of ILI cases each day from Monday to Sunday.

At present, there are 30 communities participating in the ILI surveillance program, 24 of which are from Sioux Lookout Zone, five of which are from Thunder Bay Zone, and one community from Moose Factory Zone.

Method and Analysis

The Community Health Nurse in each participating community will submit a weekly fax to a confidential fax line in Ottawa, where the daily ILI counts will be rolled up to a weekly count, collated and then forwarded to the regional epidemiologist for ongoing monitoring and analysis.

The regional epidemiologist will collate and analyze the data from each of the four zones each week. Weekly regional and zone-specific summary reports will be distributed to regional staff and the appropriate zone staff, including the Communicable Disease (CD) nurse and Zone Nursing Officer (ZNO).

Ontario Ministry of Health and Long-term Care, Provincial Infectious Diseases Advisory Committee. (2008). Preventing febrile respiratory illnesses: Protecting patients and staff (Best Practices in Surveillance and InfectionPrevention and Control for Febrile RespiratoryIllness (FRI), excluding Tuberculosis, for AllOntario Health Care Settings). Queen's Printer for Ontario: Toronto, Ontario. Retrieved online June 5, 2009 from: http://www.health.gov.on.ca/english/providers/program/infectious/diseases/best prac/bp fri 080406.pdf

Santé Canada

In case of an elevated rate, the CD nurse will coordinate with the community-specific nurse to ensure that the community receives the appropriate resources and expertise.

Role of the CD Nurse

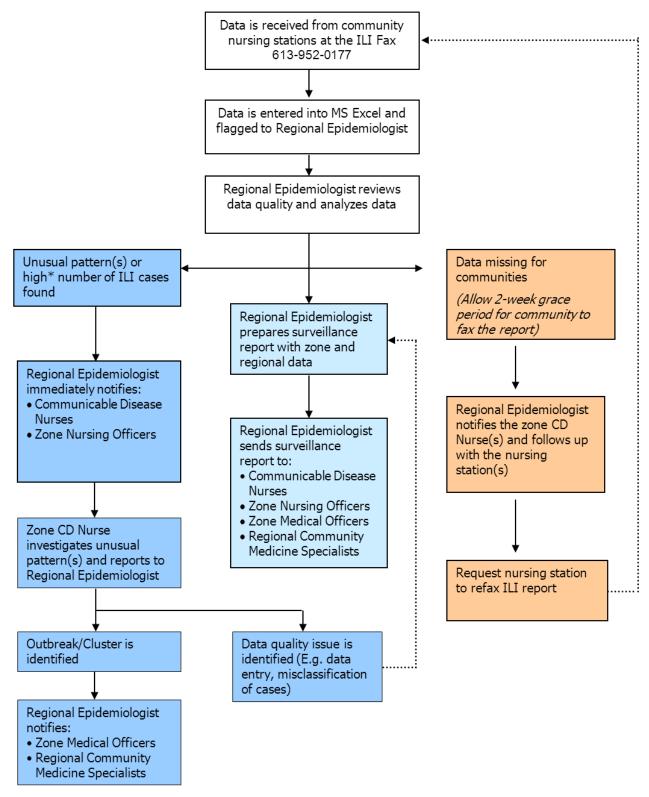
The main role of the CD nurse in ILI surveillance is communicating to and providing support to the Community Health Nurses in the communities that are reporting ILI cases to the region, as well as communicating with the regional epidemiologist. The main responsibilities of the CD nurses are outlined below.

- Responding to elevated ILI counts (as informed by the regional epidemiologist), by following up with communities and providing appropriate support
- Verification of ILI data with communities when an increase is observed (e.g. ensuring that ILI cases accurately met the case definition), and collecting preliminary data concerning the nature of the apparent increase
- Following up with communities to ensure compliance
- Ensuring that CHNs have adequate support to maintain ongoing surveillance
- Providing input and initiating any changes, modifications and enhancements to the system, as jointly decided with zone and regional staff.

Santé

Canada

Routine Surveillance Protocol for Influenza-like Illness (ILI) in First Nations Communities (Flow-Chart)



INFLUENZA-LIKE ILLNESS SYNDROMIC SURVEILLANCE

First Nations and Inuit Health - Ontario Region, Health Canada

(Site Information	<u>n</u>
	Community:	
	Contact:	
⇃		

Influenza-like Illness (ILI) case definition:

ACUTE ONSET of respiratory illness with fever and cough and with one or more of the following:

sore throat

Santé

Canada

- arthralgia
- myalgia, or
- prostration which could be due to influenza virus.

In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

Public Health Agency of Canada, 2005.

Enter ticks or checks for ILI cases seen daily:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Summary of Cases:

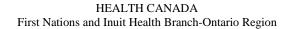
Please enter the weekly **TOTAL** number of people with ILI seen in the Nursing Station between the dates entered below: (If there were none, please enter "0" and fax sheet to number below)

From Monday	DD	-	MM	-	YYYY	
To Sunday	DD	-	MM	-	YYYY	

Enter weekly		•
TOTAL number		Do not write outside to
of people with ILI		lines through 0's

FAX EVERY MONDAY TO: 613-952-0177

If you experience any problems, please contact Rachel Bennett at 613-941-0081



SCHOOL ABSENTEEISM SURVEILLANCE:

Santé

Canada

Background

In response to the declaration of an influenza A/H1N1 pandemic (pH1N1) in June 2009 by the World Health Organization, provincial recommendations concerning school absenteeism surveillance, and the occurrence of outbreaks of pH1N1 in first Nations communities in Ontario region, a School Absenteeism Surveillance system was launched in October 2009 in Southern Ontario Zone, to monitor illness-related absenteeism. Due to positive response and feedback from the schools that participated, this program continues in Southern Ontario Zone and is expanding into Thunder Bay and Moose Factory Zones.

Purpose

The purpose of the School Absenteeism Surveillance System is to provide an early indicator of possible illness in First Nations communities in Ontario region, such that appropriate public health interventions can be initiated to identify circulating pathogens, reduce the spread of disease, and prevent a wide-spread outbreak of disease in First Nations communities.

Any First Nation community with a daycare/early childhood care, elementary, and/or secondary school located on-reserve is invited to participate; however school absenteeism surveillance is being established largely to accommodate and monitor possible ILI activity in First Nation communities without on-reserve primary care services.

Objectives:

- To identify FNs communities with >10% <u>illness-related</u> school absenteeism (although not specifically influenza-like illness).
- To provide the information needed to initiate a scaled public health response if absenteeism rates of >10% persist over a number of days and potentially involve the broader community (e.g. infection control recommendations, screening, antiviral treatment, prophylaxis, provision of supplies, etc.).

Methods

All eligible schools and daycares have been approached with an invitation to participate. All schools will be provided a tool kit and other necessary documentation and support required to monitor school absenteeism rates.

Herein, the term '<u>site</u>' refers to any school, daycare or any other facility, that has consented to participate in the school absenteeism surveillance program.

Data Reporting and Collection

At each participating site, a primary contact will be identified (e.g. principal, school nurse, administrator) as responsible for tracking absenteeism on a daily basis.

Each site will be provided with a tool-kit which will assist in tracking school absenteeism on a daily basis. Only absenteeism amongst students will be monitored and recorded. The number of absent students that account for 10% of the school population will be predetermined, and will be used as a threshold to identify when the school absenteeism rate exceeds 10%. Staff absenteeism will be excluded from this as illness amongst staff may not necessarily be an indicator of illness in the community.

Santé Canada

This data will be collected and collated on the form provided in the tool-kit by the primary contact at each site.

The primary contact will be responsible for:

- Weekly reporting of daily absenteeism numbers to the regional epidemiologist
- Contacting the Community Health Nurse (CHN) in the event that the site records an absenteeism of over 10%.

Weekly reporting:

The primary contact will record daily illness-related absenteeism counts on the form provided for each week. These forms will be faxed to the regional epidemiologist every Friday by 5 p.m., and then filed appropriately on site. The regional epidemiologist will maintain a database of the absenteeism rates for all sites which can then be effectively used to assess illness-related absenteeism in First Nation communities.

Increased absenteeism rate:

In the event that a site records the number of students absent to be *greater than 10%* of the total number of students enrolled in the school on a given day, then the primary contact at the school will immediately contact the CHN by telephone. Upon notification, the CHN will collaborate with the primary contact at the participating site to verify that the increase in absenteeism is illness-related (vs. community event, school-related field trips, or truancy) and, if so, the nature of the illness involved (e.g. ILI, gastrointestinal (GI), other etc). The CHN, the school as well as other community members and regional staff will determine the best options for infection control and prevention strategies to implement in the school. The CHN will remain informed of the progress until absenteeism rates decrease to below 10%.

In the event that absenteeism is determined to be due to some cause other than illness, no further action will be required from the CHN other than to reinforce and encourage daily tracking. Thus, illness-related absenteeism will only be recorded by the regional epidemiologist, when confirmed by the CHN. Otherwise, all absenteeism rates will be presumed to be due to some cause other than illness.

The process of data reporting and collection can be seen in the flow chart below entitled "Methodology Flow Chart".

Each site will receive a monthly report from the regional epidemiologist, with information about absenteeism trends, ILI and outbreaks, specific for each site.

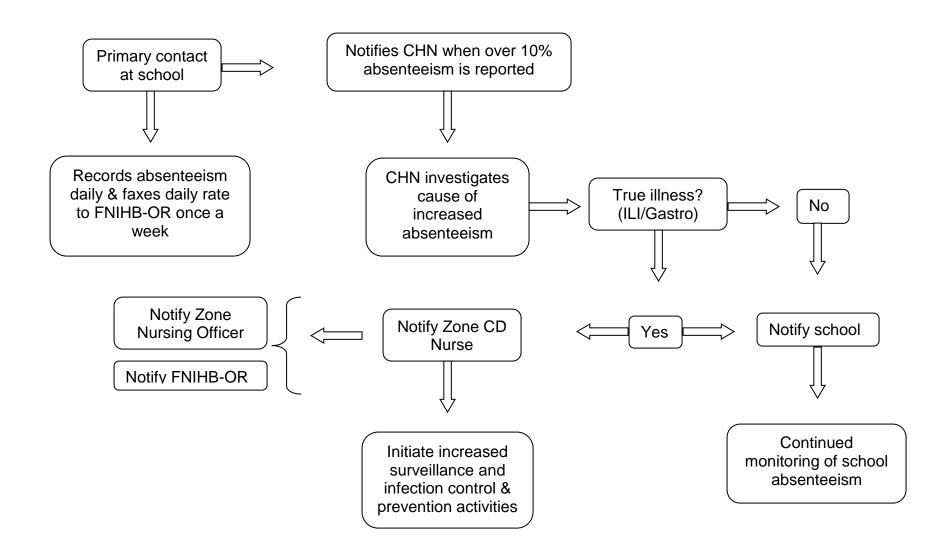
ROLES AND RESPONSIBILITIES

Santé Canada

Personnel	Roles and Responsibilities
Primary contact at participating site	 Teacher, principal, school nurse, administrator or support staff Track daily absenteeism, complete <i>Absenteeism Monitoring Form</i>, fax form to the regional epidemiologist at FNIH-OR every Friday, and store these forms on site. Contact CHN by telephone when absenteeism rate exceeds 10% Collaborate with CHN, school personnel, and parents to determine reason for illness-related absenteeism >10% (i.e. ensure absences are illness-related, identify nature of illness).
Community Health Nurse	 In the event of absenteeism exceeding 10%, verify that absenteeism is due to illness and the nature of the illness (i.e. ILI, GI, etc.). Inform zone CDN when school absenteeism exceeds 10% Convey and implement appropriate infection control measures to the school in consultation with the zone CDN. Communicate with school nurse to implement appropriate measures
CD nurse	 Collaborate with CHNs when informed of increased school absenteeism. Inform ZNO and regional epidemiologist at FNIHB-OR when school absenteeism exceeds 10%. Disseminate monthly reports provided by regional epidemiologist to each site
FNIH-OR Epidemiologist	 Develop and maintain database of absenteeism rates for all sites providing data weekly Provide a monthly report to CD nurse (site-specific reports) and to the region, with data on absenteeism rates and trends.
Zone Nursing Officer	Collaborate with zone CD nurse in the event of increased absenteeism in schools.

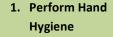
Santé Canada

SCHOOL ABSENTEEISM SURVEILLANCE FLOW CHART



Some images adapted from Northwestern Ontario Infection Control Network – NWOICN)

PUTTING ON PPE







2. Put on Gown

Tie neck and waist ties securely



5. Put on Gloves

- Put on gloves taking care not to tear or puncture glove
- If a gown is worn, the glove fits over the gown's cuff





4. Put on Protective Eyewear

- Put on eye protection and adjust to fit
- Face shield should fit over brow





3. Put on Mask/N95 Respirator

- Place mask over nose and under chin
- Secure ties, loops or straps
- Mould metal piece to your nose bridge
- For respirators, perform seal-check





Source: PIDAC Appendix L: Routine Practices and Additional Precautions in All Health Care Settings | November, 2012. Page 70

1. Remove Gloves

- Remove gloves using a glove-toglove/skin-to-skin technique
- Grasp outside edge near the wrist and peel away, rolling the glove inside-out
- Reach under the second glove and peel away
- Discard immediately into waste receptacle





2. Remove Gown

- Remove gown in a manner that prevents contamination of clothing or skin
 - Starting at the neck ties, the outer 'contaminated', side of gown is pulled forward and turned inward, rolled off the arms into a bundle, then discarded immediately in a manner that minimizes air disturbance





3. Perform Hand Hygiene





6. Perform Hand Hygiene





5. Remove Mask/N95 Respirator

- Ties/ear loops/straps are considered to be 'clean' and may be touched with the hands
- The front of the mask/respirator is considered to be contaminated
- Untile bottom tile then top tile, or grasp straps or ear loops
- Pull forward off the head, bending forward to allow mask/respirator to fall away from face
- Discard immediately into waste receptacle







4. Remove Eye Protection

- Arms of goggles and headband of face shields are considered to be 'clean' and may be touched with the hands
- The front of the goggles/face shield is considered to be contaminated
- Remove eye protection by handling ear loops, sides or back only
- Discard into waste receptacle or into appropriate container to be sent for reprocessing
- Personally-owned eyewear may be cleaned by the individual after each use



PERFORMING A RISK ASSESSMENT RELATED TO ROUTINE PRACTICES AND ADDITIONAL PRECAUTIONS

An **individual assessment** of each client/patient/resident's potential risk of transmission of microorganisms must be made by all health care providers and other staff who come into contact with them. Based on that risk assessment and a risk assessment of the task, one may determine appropriate **intervention and interaction** strategies, such as hand hygiene, waste management, use of personal protective equipment (PPE) and client/patient/resident placement, that will reduce the risk of transmission of microorganisms to and from the individual. When a client/patient/resident has undiagnosed symptoms or signs of infection, interventions must be informed by **organizational requirements.**

Risk Assessment Steps to be Performed by a Health Care Provider to Determine an Individual's Risk of Transmission of Infectious Agents and the Rationale for Associated Protective Measures

Perform A Risk Assessment

Rationale for Action



<u>Decision #1:</u> Do I need protection for what I am about to do because there is a risk of exposure to blood and body fluids, mucous membranes, non-intact skin or contaminated equipment?

Individual Risk Assessment #1

<u>Decision #2</u>: Do I need protection for what I am about to do because the client/patient/resident has undiagnosed symptoms of infection?

Individual Risk Assessment #2



<u>Decision #3</u>: What are the organizational requirements for this client/patient/resident who has an identified infection?

Organizational Risk Assessment

Intervention and Interaction #1:

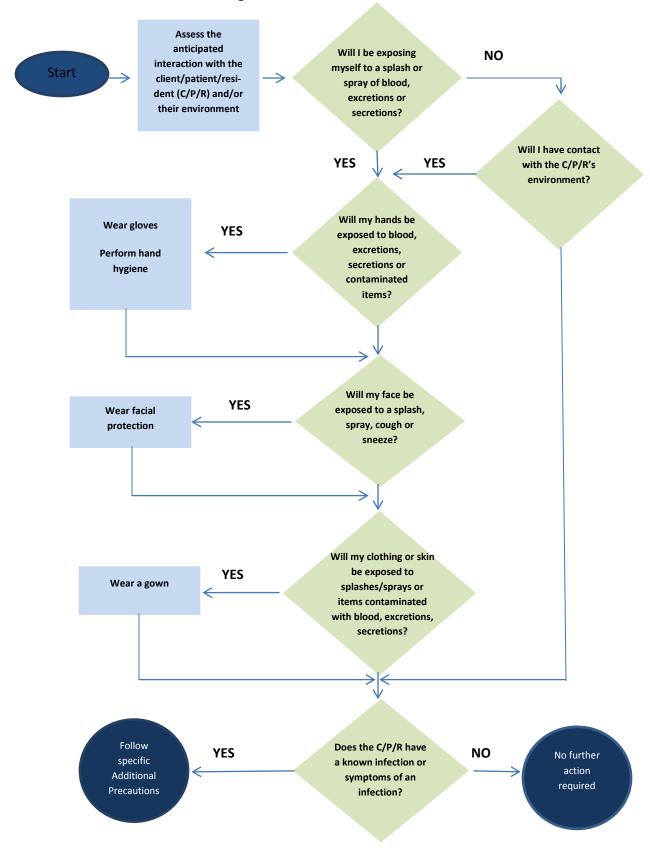
I must follow Routine Practices because there is a risk that I might expose myself to an infection that is transmitted via this route, or expose the client/patient/resident to my microorganisms (see algorithms)

Intervention and Interaction #2: I must alert someone about the client/patient/resident who has symptoms so that a diagnosis may be made, and I must determine what organizational requirements are to be put in place to protect myself and others.

Intervention and Interaction #3:

I must follow the procedures proscribed for this infection to protect myself and others (see Appendix B).

Routine Practices Risk Assessment Algorithm for All Client/Patient/Resident Interactions



CLINICAL SYNDROMES/CONDITIONS WITH REQUIRED LEVEL OF PRECAUTIONS

ORGANISM/DISEASE	CATEGORY*	TYPE OF PRECAUTION	SINGLE ROOM?	DURATION OF PRECAUTIONS	COMMENTS
*= Paediatric precautions RP= Routine Practices	s apply to children who				with hygiene
ABSCESS	Minor	RP	No		If community-associated
	Major (drainage not contained by dressing)	Contact	Yes	Continue precautions for duration of uncontained drainage.	MRSA is suspected, use Contact Precautions until ruled out.
ADENOVIRUS INFECTION	Conjunctivitis Pneumonia	Contact Droplet + Contact	Yes Yes	Continue precautions for duration of symptoms.	May cohort patients in outbreaks.
AIDS	Se HIV				
AMOEBIASIS	Adult	RP	No		Reportable Disease
(Dysentery) Entamoeba histolytia	Paediatric* and incontinent or non-compliant adult	Contact	Yes		
ANTHRAX Bacillus anthracis	Cutaneous or pulmonary	RP	No		Reportable Disease
Bucilius untillucis					Notify Infection Control
ANTIBIOTIC-RESISTANT ORGANISMS (AROs) -not listed elsewhere		Contact may be indicated	May be indicated	Precautions, if required, are initiated and discontinued by Infection Control.	See also listings under MRSA, VRE, ESBL and CPE.
ARTHROPOD-BORNE VIRAL INFECTIONS Eastern, Western, & Venezuelan equine encephalomyelitis; St. Louis & California encephalitis; West Nile Virus		RP	No		Reportable Disease No person-to-person transmission
ASCARIASIS (Roundworm) Ascaris lumbricoides		RP	No		No person-to-person transmission
ASPERGILLOSIS Aspergillus species		RP	No		If several cases occur in close proximity, look for environmental source.
BABESIOSIS		RP	No		Tick-borne. Not transmitted from person-to-person except by transfusion.
BLASTOMYCOSIS Blastomyces dermatitidis	Cutaneous or pulmonary	RP	No		No person-to-person transmission.
BOTULISM	See Food Poisoning/Food-bor	ne Illness	<u>'</u>		
BRONCHITIS/BRONCHIOLITIS	See Respiratory Infections				

ORGANISM/DISEASE	CATEGORY*	TYPE OF PRECAUTION	SINGLE N ROOM?	DURATION OF PRECAUTIONS	COMMENTS
*= Paediatric precaution RP=Routine Practices	ns apply to children w	ho are incontin	ent or too	immature to comply	with hygiene
BRUCELLOSIS (Undulant fever)		RP	No		Reportable Disease No person-to-person transmission If lesions present, see Abscess
CAMPYLOBACTER	Adult Paediatric* and incontinent or non- compliant adult	RP Contact	No Yes	Continue precautions until stools are formed.	Reportable Disease Notify Infection Control
CARBAPENEMASE- PRODUCING ENTEROBACTERIACEAE (CPE)	See Enterobacterlaceae, Res	sistant			
CAT-SCRATCH FEVER Bartonella henselae		RP	No		No person-to-person transmission.
CELLULITIS, with drainage	See Abscess				
CELLULITIS	Child < 5 years of age if Haemophilus influenzae type B is present or suspected	Droplet	Yes	Continue precautions until 24 hours of appropriate antimicrobial therapy or until H. influenzae type B is ruled out.	
CHANCROID Haemophilus ducreyi		RP	No		Reportable Disease
CHICKEN POX	See Varicella				
CHLAMYDIA	Chlamydia trachomatis genital infection or lymphogranuloma venereum	RP	No		Reportable Disease
	Chlamydia pneumonia, psittaci	RP	No		
CHOLERA Vibrio cholera	Adult Paediatric* and incontinent or non- compliant adult	RP Contact	No Yes		Reportable Disease
CLOSTRIDIUM DIFFICILE		Contact	Yes	Continue precautions until formed stool for at least two consecutive days.	Outbreaks Reportable Notify Infection Control. Laboratory-confirmed cases may be cohorted.
COCCIDIOIDOMYCOSIS (Valley Fever)	Draining lesions or pneumonia	RP	No		No person-to-person transmission
COMMON COLD Rhinovirus		Droplet + Contact	Yes	Continue precautions for duration of symptoms.	
CONGENITAL RUBELLA	See Rubella				
CONJUNCTIVITIS		Contact	Yes	Continue precautions until viral aetiology ruled out for duration of symptoms.	

ORGANISM/DISEASE	CATEGORY*	TYPE OF PRECAUTION	SINGLE N ROOM?		COMMENTS
*= Paediatric precautio RP= Routine Practices	ns apply to children w	ho are incontir	nent or too	immature to comply	with hygiene
COXSACKIEVIRUS	See Enteroviral Infections				
CREUTZFELDT-JAKOB DISEASE		RP	No		Reportable Disease.
(CID)					Notify Infection Control. Equipment in contact with infectious material requires special handling & disinfection practices.
CROUP		Droplet + Contact	Yes	Continue precautions for duration of illness or until infectious cause ruled out.	
CRYPTOCOCCOSIS Cryptococcosis neoformans		RP	No		No person-to-person transmission.
CRYPTOSPORIDIOSIS	Adult	RP	No		Reportable Disease
	Paediatric* and incontinent or non-compliant adult	Contact	Yes		Notify Infection Control
CYSTICERCOSIS		RP	No		No person-to-person transmission.
CYTOMEGALOVIRUS (CMV)		RP	No		Reportable Disease if congenital Transmitted by close, direct personal contact, blood transfusions or transplants.
DECUBITUS ULCER, infected	See Abscess				
DENGUE	See Arthropod-borne viral in	nfections			
DERMATITIS		RP	Yes, if extensive		If compatible with scabies, see <i>Scabies</i>
DIARRHEA	Acute infectious	See Gastroenteriti	s		
	Suspected C. difficile diarrhea	See Clostridium di	fficile		
DIPHTHERIA	Pharyngeal	Droplet	Yes	Continue precautions until	Reportable Disease
Corynebacterium diphtheriae	Cutaneous	Contact	Yes	two appropriate cultures taken at least 24 hours apart after cessation of antibiotics are negative for C. diphtheriae	Notify Infection Control
EBOLA VIRUS	See Haemorrhagic Fevers				
ECHINOCOCCOSIS		RP	No		No person-to-person transmission
ECHOVIRUS DISEASE	See Enteroviral Infections				
EHRLICHIOSIS Ehrlichia chaffeensis		RP	No		Tick-borne

ORGANISM/DISEASE	CATEGORY*	TYPE OF PRECAUTIO	SINGLE N ROOM?	DURATION OF PRECAUTIONS	COMMENTS
*= Paediatric precautio RP= Routine Practices	ns apply to children w	ho are inconti	nent or too	immature to comply	with hygiene
ENCEPHALITIS	Adult	RP	No		Reportable Disease
	Paediatric*	Contact	Yes	Continue precautions until Enterovirus is ruled out.	
ENTEROBACTERIACEAE- RESISTANT Carbapenemase-producing Enterobacteriaceae (CPE)		Contact	Yes	Continue precautions for duration of hospitalization	Notify Infection Control If readmitted, use Contact precautions
Extended-spectrum Beta- lactamase producing Enterobacteriaceae (ESBL)		Contact may be indicated	May be indicated	Precautions, if indicated, are initiated and discontinued by Infection Control	Notify Infection Control
ENTEROBIASIS (Pinworm disease) Enterobius vermicularis		RP	No		Transmission is faecal-oral directly or indirectly through contaminated articles e.g., bedding.
ENTEROCOLITIS	See Gastroenteritis – Necro	tizing Enterocolitis			
ENTEROVIRAL INFECTIONS (Coxsackie viruses, Echo	Adult	RP	No		
viruses)	Paediatric*	Contact	Yes	Continue precautions for duration of illness.	
EPIGLOTTITIS, due to Haemophilus influenza	Adult	RP	No		Type B is a Reportable Disease.
Туре В	Paediatric*	Droplet	Yes	Continue precautions for 24 hours after start of effective therapy.	Notify Infection Control
EPSTEIN-BARR VIRUS (Infectious Mononucleosis)		RP	No		Transmitted via intimate contact with oral secretions or articles contaminated by them.
ERYSIPELAS	See Streptococcal Disease				
ERYTHEMA INFECTIOSUM (Parvovirus B19)	Aplastic crisis	Droplet	Yes	Continue precautions for duration of hospitalization with immunocompromised persons, or 7 days with others.	
	Fifth disease	RP	No		No longer infectious by the time rash appears.
ESCHERICHIA COLI 0157:H7	Adult	RP	No		Reportable Disease
	Paediatric* and incontinent or non-compliant adult	Contact	Yes	Continue precautions until stools are formed.	Notify Infection Control
EXTENDED SPECTRUM BETA- LACTAMASE-PRODUCING ENTEROBACTERIACEAE (ESBL)	See <i>Enterobacteriaceae</i> , Re	sistant			

ORGANISM/DISEASE	CATEGORY*	TYPE OF PRECAUTION	SINGLE N ROOM?	DURATION OF PRECAUTIONS	COMMENTS
*= Paediatric precaution	ns annly to children w	ho are incontir	ent or too	immature to comply	with hygiene
RP= Routine Practices	ons apply to clinaren w		ichi di too	initiature to compry	with hygicale
FIFTH DISEASE	See Erythema Infectiosum				
FOOD POISIONING/FOOD BORNE ILLNESS	Clostridium botulinum (Botulism)	RP	No		Reportable Disease No person-to-person transmission.
	Clostridium perfringens Salmonella or Escherichia coli 0157:H7 in paediatric or incontinent adult if stool cannot be contained	RP Contact	No Yes	Continue precautions until Salmonellosis or E. <i>coli</i> 0157:H7 are ruled out.	Reportable Disease Notify Infection Control
	Other causes	RP	No		
FRANCISELLA TULARENSIS	See Tularemla				
FURUNCULOSIS Staphylococcus aureus	See Abscess				
GANGRENE	Gas gangrene due to any bacteria	RP	No		No person-to-person transmission
GASTROENTERITIS	Acute infectious	Contact	Yes	Continue precautions until C.difficile and norovirus or other viral agents ruled out	Outbreaks are reportable Notify Infection Control
	Paediatric* and incontinent/non-compliant adult	Contact	Yes	Continue precautions for duration of illness.	See specific organism if identified
GERMAN MEASLES	See Rubella				
	Adult	RP	No		Reportable Disease
GIARDIASIS Giardia lamblia	Paediatric* and incontinent on non-compliant adult	Contact	Yes	Continue precautions until stools are formed	
GONORRHEA Neisseria gonorrhoeae		RP	No		Reportable Disease Sexual transmission.
GRANULOMA INGUINALE		RP	No		Sexual transmission.
HAEMOPHILUS INFLUENZAE TYPE B	Pneumonia – adult Pneumonia – paediatric*	RP Droplet	No Yes	Continue precautions until 24 hours after effective treatment	Reportable Disease if invasive
	Meningitis	See Meningitis			
HAND, FOOT, & MOUTH DISEASE	See Enteroviral Infection				
HANTAVIRUS PULMONARY SYNDROME		RP	No		Reportable Disease No person-to-person transmission.
HANSEN'S DISEASE	See Leprosy				
HAEMORRHAGIC FEVERS (e.g., Lassa, Ebola, Marburg)		Droplet + Contact	Yes, with negative airflow, door	Continue precautions until symptoms resolve	Notify Public Health Immediately
		Airborne if pnuemonia	closed if pneumonia		Notify Infection Control immediately

ORGANISM/DISEASE	CATEGORY*	TYPE OF PRECAUTION	SINGLE N ROOM?	DURATION OF PRECAUTIONS	COMMENTS
*= Paediatric precaution RP= Routine Practices	ns apply to children w	ho are incontir	ent or too	immature to comply	with hygiene
HEPATITIS, VIRAL Hepatitis A & E	Adult	RP	No		Reportable Disease
	Paediatric* and incontinent or non-compliant adult	Contact	Yes	Duration of precautions: < 3 years: duration of hospital stay >3 years: one week from symptoms onset	
Hepatitis B & C (including Delta)		RP	No		Reportable Disease Report to Occupational Health if health care provider has percutaneous or mucous membrane exposure
HERPANGINA	See Enterovirus				
HERPES SIMPLEX	Encephalitis	RP	No		Reportable Disease
	Mucocutaneous – recurrent	RP	No		Gloves for contact with lesions.
	Disseminated/severe	Contact	Yes	Continue precautions until lesions crusted and dry.	
	Neonatal infection, and infants born to mothers with active genital herpes until neonatal infection ruled out	Contact		Continue precautions for duration of symptoms	Reportable Disease Notify Infection Control
HISTOPLASMOSIS Histoplasma capsulatum		RP	No		No person-to-person transmission
HIV		RP	No		Reportable Disease Report to Occupational Health if health care provider has percutaneous or mucous membrane exposure
HOOKWORM DISEASE (Ancylostomiasis)		RP	No		No person-to-person transmission
HUMAN HERPESVIRUS 6 (Roseola)	See Roseola	<u>'</u>			
IMPETIGO	See Abscess				
INFECTIOUS MONONUCLEOSIS	See Epstein-Barr virus				
INFLUENZA (sesonal)		Droplet + Contact	Yes	Continue precautions for 5 days after onset of illness.	Reportable Disease Notify Infection Control

ORGANISM/DISEASE	CATEGORY*	TYPE OF PRECAUTION	SINGLE ROOM?		COMMENTS
*= Paediatric precaution RP= Routine Practices	ons apply to children w	ho are incontin	ent or too	immature to comply	with hygiene
KAWASAKI SYNDROME		RP	No		
LASSA FEVER	See Haemorrhagic Fevers				
LEGIONNAIRES' DISEASE Legionella pneumophila		RP	No		Reportable Disease Notify Infection Control No person-to-person transmission.
LEPROSY (Hansen's disease) Mycobacterium leprae		RP	No		Reportable Disease
LEPTOSPIROSIS Leptospira sp.		RP	No		No person-to-person transmission
LICE	See Pediculosis				
LISTERIOSIS Listeria monocytogenes		RP	No		Reportable Disease
LYME DISEASE Borrelia burgdorferi		RP	No		Reportable Disease No person-to-person transmission
LYMPHOCYTIC CHORIOMENINGITIS (Aseptic meningitis)		RP	No		No person-to-person transmission
LYMPHOGRANULOMA VENEREUM	See Chlamydia trachomatis				
MALARIA Plasmodium species		RP	No		Reportable Disease No person-to-person transmission, except by blood transfusion
MARBURG VIRUS	See haemorrhagic Fevers				
MEASLES (Rubeola)		Airborne	Yes, with negative airflow, door closed	Continue precautions for four days after start of rash, and for duration of illness in immunocompromised patients.	Reportable Disease Notify Infection Control. Only immune staff should enter the room.
MENINGITIS	Aetiology unknown- adult Aetiology unknown- paediatric*	Droplet Droplet + Contact	Yes Yes		Reportable Disease
	Haemophilus influenza type B – adult Haemophilus influenza type B – paediatric*	RP Droplet	No Yes	Continue precautions for 24 hours after start of	
	Meningococcal (Neisseria meningitides)	Droplet	Yes	effective therapy. Continue precautions for 24 hours after start of effective therapy.	Reportable Disease Notify Infection Control
	Other bacterial	RP	No	епесиче шегару.	Reportable Disease See listings by bacterial type
	Viral – adult ("aseptic")	RP	No		Reportable Disease See also Enteroviral
	Viral – paediatric*	Contact	Yes	<u> </u>	1

ORGANISM/DISEASE	CATEGORY*	TYPE OF PRECAUTIO	SINGLE N ROOM?	DURATION OF PRECAUTIONS	COMMENTS
*= Paediatric precaution RP= Routine Practices	ns apply to children w	ho are incontir	nent or too	immature to comply	with hygiene
Meningococcal Disease Neisseria meningitides		Droplet	Yes	Continue precautions for 24 hours after start of effective therapy.	Reportable Disease Notify Infection Control
MRSA Methicillin-resistant Staphylococcus aureus		Contact (+ Droplet if in sputum and coughing)	Yes	Continue precautions until discontinued by infection control.	
MUMPS (Infectious parotitis)		Droplet	Yes	Continue precautions for five days after onset of swelling.	Reportable Disease Notify Infection Control
MYCOBACTERIA Nontuberculosis, atypical e.g. Mycobacterium avium		RP	No		No person-to-person transmission.
MYCOBACTERIUM TUBERCULOSIS	See Tuberculosis				
MYCOPLASMA PNEUMONIA		Droplet	Yes	Continue precautions for duration of illness.	
NECROTIZING ENTEROCOLITIS		RP	No		Cohorting ill infants + Contact Precautions may be indicated for clusters/outbreaks. Unknown if transmissible.
NECROTIING FASCIITIS	See Streptococcal Disease, G	Group A			
NEISSERIA MENINGITIDIS	See Meningococcal Disease				
NOROVIRUS		Contact	Yes	Continue precautions until 48 hours after resolution of symptoms	Outbreaks Reportable Notify Infection Control
OPHTHALMIA NEONATORUM	See Conjunctivitis				
PARAINFLUENZA VIRUS		Droplet + Contact	Yes	Continue precautions for duration of symptoms.	Cohorting may be necessary during outbreaks.
PARATYPHOID FEVER Salmonella paratyphi		RP	No		Reportable Disease
PARVOVIRUS B19	See Erythema Infectiosum				

ORGANISM/DISEASE	CATEGORY*	TYPE OF PRECAUTIO	SINGLE N ROOM?	DURATION OF PRECAUTIONS	COMMENTS
*= Paediatric precaution RP= Routine Practices	ns apply to children w	ho are inconti	nent or too i	mmature to comply	with hygiene
PEDICULOSIS (Lice)		RP, plus gloves for direct patient contact	No	Continue precautions for 24 hours after application of pediculicide.	
PERTUSSIS (Whooping Cough) Bordetella pertussis		Droplet	Yes	Continue precautions for five days after start of treatment or three weeks if not treated	Reportable Disease Notify Infection Control
PINWORMS	See Enterobiasis				
PLAGUE Yersinia pestis	Pneumonic Bubonic	Droplet RP	Yes No	Continue precautions for 48 hours of effective therapy.	Reportable Disease Notify Infection Control
PLEURODYNIA	See Enteroviral Infection				
PNEUMONIA Aetiology Unknown		Droplet + Contact	Yes	Continue precautions until aetiology established or clinical improvement on empiric therapy	
POLIOMYELITIS		Contact	Yes	Continue precautions for 6 weeks after onset of illness	Reportable Disease Notify Infection Control
PSEUDOMEMBRANOUS COLITIS	See Clostridium difficile				nous y miceus. Control
PSITTACOSIS (Ornithosis) Chlamydia psittaci	See Chlamydia				
PHARYNGITIS	Adult Paediatric*	RP Droplet + Contact	No Yes	Continue precautions for duration of illness, or 24	
		Contact		hours of effective therapy if Group A streptococcus	
Q FEVER Coxiella burnetii		RP	No		Reportable Disease No person-to-person transmission
RABIES Rhabdovirus		RP	No		Reportable Disease Notify Infection Control
					Person-to-person transmission not documented except via corneal transplantation.
					Open wound/mucous membrane exposure to saliva of a patient should be considered for prophylaxis
RESISTANT ORGANISMS	See Antibiotic-Resistant Org	ganisms			

ORGANISM/DISEASE	CATEGORY*	TYPE OF PRECAUTIOI	SINGLE N ROOM?	DURATION OF PRECAUTIONS	COMMENTS
*= Paediatric precautio RP= Routine Practices	ns apply to children w	ho are incontin	nent or too i	mmature to comply	with hygiene
RESPIRATORY INFECTIONS, acute febrile		Droplet + Contact	Yes	Continue precautions until symptoms improve or infectious cause identified.	See specific organism, if identified
RESPIRATORY SYNCYTIAL VIRUSE (RSV)		Droplet + Contact	Yes	Continue precautions for duration of illness	
REYE'S SYNDROME		RP	No		May be associated with viral infection.
RHEUMATIC FEVER		RP	No		Complication of a Group A streptococcal infection.
RHINOVIRUS	See Common Cold				
RINGWORM	See Tinea				
ROSEOLA INFANTUM (Exanthem Subitum, Sixth disease, HHV6)		RP	No		Transmission requires close, direct personal contact
ROTAVIRUS		Contact	Yes	Continue precautions until formed stool.	
ROUNDWORM	See Ascariasis				
RUEBELLA (German Measles)	Acquired	Droplet	Yes	Continue precautions for seven days after onset of rash	Reportable Disease Notify Infection Control
	Congenital	Droplet + Contact	Yes	Continue precautions for one year after birth, unless urine and nasopharyngeal cultures done after three months of age are negative.	Only immune staff should provide care. Pregnant health care providers should <u>not</u> provide care regardless of immune status.
SALMONELLOSIS Salmonella species	Adult Paediatric* and incontinent or non- compliant adult	RP Contact	No Yes	Continue precautions until formed stool.	Reportable Disease Notify Infection Control
SEVERE ACUTE RESPIRATORY SYNDROME (SARS) or Acute Respiratory Illness with travel to high risk geographical area	Compliant	Droplet + Contact N95 respirator for aerosol- generating procedures	Yes	Continue precautions 10 days following resolution for fever if respiratory symptoms have also resolved.	Reportable Disease Notify Public Health immediately Notify Infection Control immediately
SCABIES Saroptes scabei	Limited, "typical" Crusted, "Norwegian"	RP, gloves for skin contact	No Yes	Continue precautions until 24 hours after application of scabicide.	
SCALDED SKIN SYNDROME	See Abscess, major			FF 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	
SHIGELLOSIS Shigella species	See Gastroenteritis				
SHINGLES	See Varicella Zoster				

ORGANISM/DISEASE	CATEGORY*	TYPE OF PRECAUTION	SINGLE N ROOM?	DURATION OF PRECAUTIONS	COMMENTS
*= Paediatric precautio RP= Routine Practices	ns apply to children w				with hygiene
SMALLPOX	See Variola				
STAPHYLOCOCCAL DISEASE Staphylococcus aureus	Food poisoning Skin, wound, or burn infection	See food poisoning	g/Food-borne ill	iness	
	Pneumonia – adult	RP	No		
	Pnuemonia – paediatric*	Droplet	Yes	Continue precautions until 24 hours of effective therapy	
	Toxic Shock Syndrome (TSS)	RP	No		
STREPTOCOCCAL DISEASE Group A Streptococcus	Skin, wound or burn infection, including necrotizing fasciitis	Droplet + Contact	Yes	Continue precautions until 24 hours of effective treatment.	Reportable Disease if invasive Notify Infection Control
	Toxic shock-like syndrome (TSLS)	Droplet + Contact	Yes		
	Pneumonia	Droplet	Yes		
	Pharyngitis/scarlet fever – paediatric*	Droplet	Yes		
	Endometritis (Puerperal Sepsis)	RP	No		
	Pharyngitis/scarlet fever – adult				
GROUP B STREPTOCOCCUS	Neonatal	RP	No		Reportable Disease Notify Infection Control
Streptococcus pneumonia (pneumococcus)		RP	No		
STRONGYLOIDIASIS Strongyloides stercoralis		RP	No		May cause disseminated disease in immunocompromised
SYPHLIS Treponema pallidum		RP, gloves for contact with skin lesions			Reportable Disease
TAPEWORM DISEASE Diphyllobothrium latum (fish) Hymenolepis nana, Taenia saginata (beef) Taenia solium (Pork)		RP	No		Autoinfection possible.
TETANUS Clostridium tetani		RP	No		Reportable Disease No person-person transmission.
TINEA (Fungus infection) dermatophytosis dermatomycosis, ringworm)		RP	No		Thorough cleaning of bath and shower after use. No shared combs or brushes.

ORGANISM/DISEASE	CATEGORY*	TYPE OF PRECAUTION	SINGLE N ROOM?	DURATION OF PRECAUTIONS	COMMENTS
*= Paediatric precaution RP= Routine Practices	ons apply to children w				with hygiene
TOXOPLASMOSIS Toxoplasma gondii		RP	No		No person-to-person transmission except vertical.
TOXIC SHOCK SYNDROME	See Staphylococcal & Strept	ococcal Disease			
TRENCHMOUTH	See Vincent's angina				
TRICHINOSIS Trichinella spiralis		RP	No		Reportable Disease No person-to-person transmission
TRICHOMONIASIS Trichomonas vaginalis		RP	No		Sexual Transmission
TUBERCULOSIS Mycobacterium tuberculosis	Extrapulmonary, no draining lesions	RP	No		Reportable Disease Notify Infection Control
	Extrapulmonary, draining lesions	Airborne	Yes, with negative airflow and door closed	Continue precautions until drainage ceased or three consecutive negative AFB smears	Assess for concurrent pulmonary TB.
	Pulmonary – confirmed or suspected laryngeal disease	Airborne	Yes, with negative airflow and door closed	Continue precautions until TB ruled out. If confirmed, until patient has received two weeks of effective therapy, is improving clinically and has three consecutive sputum smears negative for AFB, collected 24 hours apart. If multidrug-resistant TB, until culture negative.	Reportable Disease Notify Infection Control
	Skin-test positive with no evidence of current disease	RP	No		Latent Tuberculosis infection (LTBI)
TULAREMIA Francisella tularensis		RP	No		Reportable Disease No person-to-person transmission. Notify Microbiology laboratory if suspected, as aerosols from cultures are infectious.
TYPHOID FEVER Salmonella typhi		RP	No		Reportable Disease
TYPHUS Rickettsia species		RP	No		Transmitted through close personal contact, but not in

ORGANISM/DISEASE	CATEGORY*	TYPE OF PRECAUTIO	SINGLE N ROOM?	DURATION OF PRECAUTIONS	COMMENTS
* 5 !:					absence of lice.
*= Paediatric precaution	ns apply to children w	ho are incontir	nent or too ii	mmature to comply	with hygiene
RP= Routine Practices		<u> </u>			T
URINARY TRACT INFECTION		RP	No		
VANCOMYCIN-RESISTANT ENTEROCOCCUS (VRE)	See VRE				
VANCOMYCIN-RESISTANT STAPHYLOCOCCUS AUREUS (VRSA)	See VRSA				
VARICELLA (Chickenpox)		Airborne	Yes, with negative air flow and door closed	Continue precautions until all vesicles have crusted and for at least five days.	Reportable Disease Notify Infection Control Neonates born to mothers with active varicella should be isolated at birth. Only immune staff should enter the room.
VARICELLA ZOSTER (Shingles, Zoster) Herpes zoster	Immunocompromised patient or disseminated	Airborne	Yes, with negative air flow and door closed	Continue precautions until all lesions have crusted and dried.	Reportable Disease Only immune staff should enter the room.
	Localized in all other patients	RP	No		Roommates and staff must be immune to chicken pox.
VARIOLA (Smallpox)		Airborne + Contact	Yes, with negative air flow and door closed	Continue precautions until all lesions have crusted and separated (3 to 4 weeks)	Report to Public Health immediately Notify Infection Control immediately.
VIBRIO	See Gastroenteritis or Chole	ra			
VINCENT'S ANGINA (Trench mouth)		RP	No		
VIRAL DISEASES – Respiratory (If not covered elsewhere)		Droplet + Contact	Yes		See also specific disease/organism.
VRE Vancomycin-resistant Enterococcus		Contact	Yes	Continue precautions until discontinued by Infection Control	Notify Infection Control
VRSA Vancomycin-resistant Staphylococcus aureus		Contact	Yes	Continue precautions for duration of hospital stay	Notify Infection Control

ORGANISM/DISEASE	CATEGORY*	TYPE OF	SINGLE	DURATION OF	COMMENTS
		PRECAUTION	ROOM?	PRECAUTIONS	
*= Paediatric precautions apply to children who are incontinent or too immature to comply with hygiene					
RP= Routine Practices					
WEST NILE VIRUS (WNV)	See Arthropod-borne Viral Fevers				
WHOOPING COUGH	See Pertussis				
WOUND INFECTIONS	See Abscess				
YELLOW FEVER	See Arthropod-borne Viral Fevers	3			
YERSINIA ENTEROCOLITICA	See Gastroenteritis				
YERSINIA PESTIS	See Plague				
ZOSTER	See Herpes Zoster				

[Based on Health Canada's 'Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care' and the Center for Disease Control's '2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Health Care Settings']





Contact Precautions

Y Jos	Hand Hygiene as per Routine Practices Hand hygiene is performed: √ Before and after each patient 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 other 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 patient's environment √ Whenever there is doubt about the necessity for doing so
	Patient Placement ∨ Single room with own toileting facilities √ Door may remain open ∨ Perform hand hygiene on leaving the room
	Gown (based on risk assessment) √ Wear a long-sleeved gown when entering the patient's room or bed space if skin or clothing will come into direct contact with the patient or the patient's environment
	Gloves (based on risk assessment) ∨ Wear gloves when entering the patient's room or bed space ∨ Wearing gloves is NOT a substitute for hand hygiene ∨ Remove gloves on leaving the room or bed space and perform hand hygiene
	Environment and Equipment √ Dedicate routine equipment to the patient (e.g., stethoscope, commode) √ Disinfect all equipment that comes out of the room √ All high-touch surfaces in the patient's room must be cleaned at least daily
	Visitors √ Visitors must wear gloves and a long-sleeved gown if they will be in contact with other patients or will be providing direct care*, as required by Routine Practices √ Visitors must perform hand hygiene before entry and on leaving the room

*<u>Direct Care</u>: Providing hands-on care, such as bathing, washing, turning the patient, changing clothing, continence care, dressing changes, care of open wounds/lesions or toileting. Feeding and pushing a wheelchair are not classified as direct care.

PIDAC: Routine Practices and Additional Precautions in All Health Care Settings, November 2012, p. 64

Santé

Canada



DEFINITION

- *Staphylococcus aureus* resistant to all of the beta-lactam classes of antibiotics (such as penicillins, penicillinase-resistant penicillins (e.g., cloxacillin) and cephalosporins).
- Community associated or CA-MRSA refers to strains linked to colonization and transmission in the community.

EPIDEMIOLOGY

- CA-MRSA detection is growing globally.
- Higher risk populations vary geographically and include: young adults, children <2 years, athletes in contact
 sports, those with chronic dermatological conditions, those living in congregate or overcrowded conditions or
 of lower socioeconomic status, injection drug users, patients with recent or recurrent antibiotic use, aboriginals,
 men who have sex with men, military personnel, and residents of correctional facilities.
- CA-MRSA may still occur in persons with no apparent risk factors.
- In some areas of the United States, the majority of skin and soft tissue S. aureus infections are CA-MRSA.
- The epidemiology and management of MRSA in the community may evolve quickly. This was the case in parts of the United States. Close monitoring of the local epidemiology, if available, is important.

TRANSMISSION AND VIRULENCE

- Transmission occurs through direct contact between persons or through contact with contaminated objects or surfaces.
- Some CA-MRSA strains produce toxins associated with more severe systemic and local disease, however the aetiology of MRSA's increased virulence in the community remains an ongoing debate.

DIAGNOSIS AND TREATMENT (SEE ALGORITHM)

Mild and Moderate Disease Presentation

- Minor skin and soft tissue infections (SSTIs) (folliculitis, furuncles, small abscesses without cellulitis) do not need to be routinely cultured for MRSA.
- Cornerstones of CA-MRSA management are incision and drainage of purulent lesions and proper follow-up wound care.



Methicillin-Resistant Staphylococcus aureus in the Community (CA-MRSA)

- Systemic antibiotic treatment IS NOT recommended for minor SSTIs or small abscesses (<5 cm) without cellulitis except in young infants and the immuno-compromised.
- Systemic antibiotic treatment is recommended for small abscesses with cellulitis and for larger abscesses (see algorithm for choice of antibiotics).

Severe or Unusual Disease Presentation

- Extensive cellulitis or multiple abscesses with associated systemic features.
- Necrotizing pneumonia, often with an influenza-like prodrome leading to shock or respiratory failure.
- Endocarditis
- Other presentations of MRSA may include osteomyelitis, pyomyositis, necrotizing fasciitis, septic thrombophlebitis, and sepsis syndrome.
- Treat in consultation with physician with infectious disease expertise.

PREVENTION OF MRSA TRANSMISSION

- Requires consistent application and reinforcement of good hygienic practices and judicious use of antibiotics.
- If skin lesions are present instruct the patient to:
 - Cover lesions to contain drainage or exudates
 - Not share personal products that are in contact with the skin; for example: deodorant, razors, toothbrushes, towels, nail files, combs and brushes
 - Not share unwashed towels
 - Discard contaminated waste, including used dressings, in a safe and timely manner (e.g., into a garbage pail lined with a plastic bag, so the bag can be removed and tied without re-contaminating hands)
 - Wash hands with soap and water or use alcohol-based hand rub after touching any skin lesions and potentially infected materials, such as soiled dressings
- After the patient leaves the examining room, immediately wipe all surfaces and patient care equipment (blood
 pressure cuff, stethoscope, etc.) that have been in contact with the patient, with an approved hospital grade
 disinfectant such as a quaternary ammonium or hydrogen peroxide solution.
 - Hospital grade disinfectant wipes with approved hospital grade disinfectants in easy dispense containers are also available

SCREENING AND DECOLONIZATION

- Routine screening for colonization of nares or other sites is NOT recommended.
- Decolonization should be considered only in exceptional circumstances, such as recurrent infections and transmission within a family. This should be done in consultation with an infectious disease specialist.

Vancomycin Resistant Enterococci (VRE)

The Basics:

- VRE is a bacteria that is resistant to some antibiotics and can live outside of the body for long periods of time.
- VRE lives in the bowel and fecal matter of a person who is colonized or infected with it.
- VRE most commonly moves from person to person by direct contact between people – usually on hands. It can also move indirectly on health care equipment.
- People at risk for VRE colonization/infection include the elderly, those with repeated contact with the health care system and those with chronic health conditions.

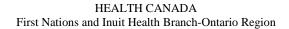
Mode of Transmission:

- Direct contact
- Indirect contact

How to Prevent Spread:

- Use Contact Precautions for direct care activities.
- Follow the 4 Moments for Hand Hygiene.
- Encourage clients to clean their hands.
- Clean and disinfect equipment between uses.
- No special laundry practices are needed.
- Encourage regular cleaning in the client's home, with special attention to bathrooms and to items that are frequently touched such as light switches and door knobs.

Source: PHO Infection Prevention and Control Reference Tool for health care providers in the community. Revised September 2011



Clostridium difficile

The Basics:

- Clostridium difficile (C. difficile or C. diff) is a bacteria that lives in the bowel
 and feces.
- It causes disease when the normal bacteria in the bowel are disrupted as a result of antibiotic use.
- Some strains of C. diff produce toxins that cause severe diarrhea. Other complications can occur such as pseudomembranous colitis, toxic megacolon, sepsis, and death.
- No need to send follow-up specimen if client has returned to normal bowel function.

Mode of Transmission:

- Direct contact
- Indirect contact

How to Prevent Spread:

- Use Contact Precautions until normal stools resume for at least 48 hours and a thorough cleaning has been completed.
- Follow the 4 Moments for Hand Hygiene.
- Encourage clients to clean their hands.
- Clean and disinfect equipment between uses.
- No special laundry practices are needed.
- Encourage regular cleaning in the client's home, with special attention to bathrooms and to items that are frequently touched such as light switches and door knobs.

SCABIES

The Basics:

- Scabies is caused by mites that burrow into skin and lay eggs, and cause an itchy rash.
- Areas between fingers, folds of wrist, elbow and knee, genitalia, breasts and shoulder blades are most commonly infested.
- Mites do not survive away from the human body for more than three days.
- An infested person can spread scabies even if they don't have a rash.

Mode of Transmission:

- Direct contact
- Indirect contact

How to Prevent Spread:

- Use Contact Precautions for contact with client and their environment until 24 hours after prescribed treatment has been applied.
- Encourage clients to clean their environment thoroughly following application
 of treatment.
- Mites on fabrics are destroyed by washing in hot soapy water and drying on "hot" dryer cycle.
- Items that cannot be laundered or cleaned should be removed from use and stored in a sealed plastic bag for at least three days.

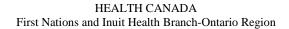


Table 6. Conditions/clinical presentations and specific etiologies requiring contact precautions

Conditions/clinical presentation		**************************************		
	Specific etiologies (See Table 10 for details)			
(See Table 9 for details) Acute viral respiratory infections bronchiolitis cold croup cough, fever, acute upper respiratory infection febrile respiratory illness fever without focus, acute, children influenza-like illness pharyngitis Conjunctivitis Dermatitis Desquamation, extensive Diarrhea,* unless continent with good hygiene Draining wounds, major wound infection, abscess, infected pressure ulcer or other skin infection if drainage cannot be contained by dressings Encephalitis, paediatric Endometritis with signs of toxic shock Food poisoning* Gastroenteritis* Gingivostomatitis, primary Hand, foot and mouth disease, children Hemolytic uremic syndrome, contact Hemorrhagic fever Hepatitis of unknown origin, children Herpangina, children Meningitis Necrotizing enterocolitis, children Pleurodynia, children Pseudomembranous colitis Rash, compatible with scabies Rash, vesicular with fever Rash, vesicular/pustular, with epidemiologic context of viral hemorrhagic fever *Use contact precautions:	Adenovirus* Adenovirus, conjunctivitis Amebiasis, children Antibiotic-resistant organisms Astrovirus, children Bocavirus Brucellosis, major draining lesions Burkholderia cepacia Campylobacter* Cholera, children Clostridium difficile Coronavirus Cryptosporidiosis, children Diphtheria, cutaneous Enteroviral infections,* children Enteroviral conjunctivitis Escherichia coli* (enteropathogenic and enterohemorrhagic strains) Giardia* Hepatitis A, E, children Herpes simplex virus encephalitis, children neonatal neonatal or mucocutaneous Human metapneumovirus Influenza seasonal, avian (see Table 10 for pandemic influenza) Monkeypox	Norovirus Parainfluenza virus Poliomyelitis, acute infantile Respiratory syncytial virus Rhinovirus Rotavirus Rubella, congenital Salmonella* Scabies Severe acute respiratory syndrome Shigella* Smallpox Staphylococcus aureus, major draining wound Streptococcus, Group A, major draining wound invasive disease or toxic shock syndrome Vaccinia Vancomycin resistant enterococci Vancomycin-resistant Staphylococcus aureus Varicella varicella herpes zoster, disseminated or localized in immunocompromised host, localized in normal host if not contained Viral hemorrhagic fevers (Crimean congo, Ebola, Lassa, Marburg) Yersinia enterocolitica*		

*Use contact precautions:

only for children with diarrhea who are incontinent or unable to comply with hand hygiene

for children with skin lesions/exudates who are unable to comply with hand hygiene or appropriate handling and disposal of purulent discharges and maintaining dressings in place

 only for adults with diarrhea who are incontinent if diarrhea cannot be contained in incontinence products or for adults with poor hygiene that contaminate their environment

Conditions/clinical presentations and specific etiologies requiring contact precautions. From Public Health Agency of Canada. (2013). *Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care Settings*. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html p.65.



Droplet Precautions



Y Joseph Marie Control of the Contro	Hand Hygiene as per Routine Practices Hand hygiene is performed: √ 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 other 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 √ Whenever there is doubt about the necessity for doing so
	Client/Patient/Resident Placement ∨ Single room with own toileting facilities if available, or maintain a spatial separation of at least 2 metres between the patient and others in the room, with privacy curtain drawn ∨ Door may remain open ∨ Perform hand hygiene on leaving the room
	Mask and Eye Protection or Face Shield ∨ Wear within 2 metres of the patient ∨ Remove and perform hand hygiene on leaving the room
	Environment and Equipment ∨ Dedicate routine equipment to the client/patient/resident (e.g., stethoscope, thermometer) ∨ Disinfect all equipment that comes out of the room ∨ All high-touch surfaces in the client/patient/resident's room must be cleaned at least daily
	Client/Patient/Resident Transport √ Patient to wear a mask during transport
	Visitors √ Non- household visitors must wear a mask and eye protection within 2 metres of the client/patient/resident √ Visitors must perform hand hygiene before entry and on leaving the room

B. Droplet Precautions in All Care Settings and Modifications for Specific Healthcare Settings

Droplet precautions should be used for the conditions/clinical presentations and specific etiologies listed in Table 7. In addition to routine practices applied properly and consistently for the care of all patients in all settings, the recommendations that follow Table 7 apply to the care of patients on droplet precautions in all care settings. Modifications for specific healthcare settings follow. Certain diseases require public health notification; check local regulations.

Table 7: Conditions/clinical presentations and specific etiologies requiring droplet precautions

Conditions/clinical presentations (See Table 9 for details)	Specific etiologies (See Table 10 for details)
Bronchiolitis	Adenovirus, respiratory strains
Cellulitis, in child <5 years old if Haemophilus	Bocavirus
influenzae type B possible	Coronavirus
Cold	Diphtheria, pharyngeal
Cough, fever, acute respiratory tract infection	H. influenzae, in children
Croup	Human metapneumolvirus
Epiglottis in child <5 years old	Influenza, seasonal, avian
Febrile respiratory illness	(see Table 10 for pandemic influenza)
Hemorrhagic fever in epidemiologic context	Meningococcus
Influenza-like illness	Monkeypox
Meningitis	Mumps
Osteomyelitis, in children if H. influenzae	Mycoplasma pneumoniae
possible	Parainfluenza virus
Paroxysmal cough, suspected pertussis	Parvovirus B-19, aplastic crisis or chronic infection
Pharyngitis	in immunocompromised patient
Pneumonia, in children	Pertussis
Rash, macupapular with fever and one of coryza,	Plague, pneumonic
conjunctivitis or cough	Respiratory syncytial virus
Rash, petechial/purpuric with fever	Rhinovirus
Rash, vesicular, pustular with epidemiologic	Rubella
context of viral hemorrhagic fever	Severe acute respiratory syndrome
0 8 0 9 1 1 1 1 1 1 1 1 1 1 1 1	Smallpox
Septic arthritis, in children if <i>H. influenzae</i>	Staphylococcus aureus in children with pneumonia
possible	Streptococcus, Group A
Toxic shock syndrome, if Group A Streptococcus	 scarlet fever or pharyngitis in children invasive disease
possible	
	Viral hemorrhagic fevers (Crimean -Congo, Ebola,
	Lassa, Marburg)

Conditions/clinical presentations and specific etiologies requiring droplet precautions. From Public Health Agency of Canada. (2013). *Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care Settings*. Retrieved from: http://publications.gc.ca/site/eng/440707/publication.html p.75.

INFLUENZA

The Basics:

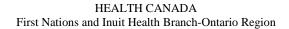
- Influenza is caused by the influenza virus.
- Influenza is a severe respiratory infection with symptoms of fever, aches and pains, weakness, fatigue, runny nose, sore throat and coughing.
- Complications can be serious and life-threatening, especially in populations such as children and the elderly.

Mode of Transmission:

- Droplet
- Direct contact
- Indirect contact

How to Prevent Spread:

- Receive annual influenza vaccination.
- Use Droplet Contact Precautions within 2 metres of the client and for direct contact with the client and the client environment.
- Wear a gown if you anticipate that your clothing will be soiled.
- Follow the 4 Moments for Hand Hygiene.
- Encourage clients to cover their mouth and nose when they cough or sneeze and clean their hands frequently.



COMMON COLD

The Basics:

- Colds are typically less serious than influenza and cause symptoms of sneezing, runny nose, watery eyes, chills and malaise. Fever is uncommon.
- A variety of different viruses cause the symptoms that we call the Common Cold.

Mode of Transmission:

- Droplet
- · Direct contact
- Indirect contact

How to Prevent Spread:

- Use Droplet Contact Precautions within 2 metres of the client and for direct contact with the client and the client environment.
- Wear a gown if you anticipate that your clothing will be soiled.
- Follow the 4 Moments for Hand Hygiene.
- Encourage clients to cover their mouth and nose when they cough or sneeze and clean their hands frequently.



Droplet + Contact Precautions



Y Jobs	Hand Hygiene as per Routine Practices Hand hygiene is performed: V Before and after each patient contact V Before performing invasive procedures V Before preparing, handling, serving or eating food V After care involving body fluids and before moving to another activity V Before putting on and after taking off gloves and other PPE V After personal body functions (e.g., blowing one's nose) V Whenever hands come into contact with secretions, excretions, blood and body fluids V After contact with items in the patient's environment V Whenever there is doubt about the necessity for doing so
	Patient Placement ∨ Single room with own toileting facilities if available, or maintain a spatial separation of at least 2 metres between the patient and others in the room, with privacy curtain drawn ∨ Door may remain open ∨ Perform hand hygiene on leaving the room
	Mask and Eye Protection or Face Shield √ Wear within 2 metres of the patient √ Remove and perform hand hygiene on leaving the room
	Gown (based on risk assessment) and Gloves V Wear gloves when entering the patient's room or bed space V Wearing gloves is NOT a substitute for hand hygiene V Remove gloves on leaving the room or bed space and perform hand hygiene V Wear a long-sleeved gown when entering the patient's room or bed space if skin or clothing will come into direct contact with the patient or the patient's environment
	Environment and Equipment √ Dedicate routine equipment to the patient (e.g., stethoscope, thermometer) √ Disinfect all equipment that comes out of the room √ All high-touch surfaces in the patient's room must be cleaned at least daily
	Patient Transport √ Patient to wear a mask during transport
	Visitors √ Non-household visitors wear a mask and eye protection within 2 metres of the patient √ Visitors must wear gloves and a long-sleeved gown if they will be in contact with other patients or will be providing direct care*, √ Visitors must perform hand hygiene before entry and on leaving the room

^{*}Direct Care: Providing hands-on care, such as bathing, washing, turning the patient, changing clothing, continence care, dressing changes, care of open wounds/lesions or toileting. Feeding and pushing a wheelchair are not classified as direct care.



Airborne Precautions



Y Jos	Hand Hygiene as per Routine Practices Hand hygiene is performed: V Before and after each client/patient/resident contact V Before performing invasive procedures V Before preparing, handling, serving or eating food V After care involving body fluids and before moving to another activity V Before putting on and after taking off gloves and other PPE V After personal body functions (e.g., blowing one's nose) V Whenever hands come into contact with secretions, excretions, blood and body fluids V After contact with items in the client/patient/resident's environment V Whenever there is doubt about the necessity for doing so
	Client/Patient/Resident Placement ∨ Single room with own toileting facilities ∨ Room must have negative pressure ventilation with room air exhausted outside or through a HEPA filter ∨ Monitor negative pressure daily while in use ∨ Door must remain closed
	N95 Respirator √ Wear a fit-tested, seal-checked N95 respirator for entry to the room for TB patients √ For measles, varicella or disseminated zoster, only immune staff are to enter the room and an N95 respirator is not required
	Environment and Equipment V Equipment that is being used by more than one client/patient/resident must be cleaned between patients/residents V All high-touch surfaces in the patient's room must be cleaned at least daily
	Client/Patient/Resident Transport √ Client/patient/resident to wear a mask during transport √ Transport staff to wear an N95 respirator during transport
	Visitors √ Visitors must be kept to a minimum √ Visitors must perform hand hygiene before entry and on leaving the room √ For TB, household members do not require an N95 respirator √ For TB, non-household visitors require an N95 respirator √ For measles/varicella, visitors should be counselled before entering the room

*<u>Direct Care</u>: Providing hands-on care, such as bathing, washing, turning the patient, changing clothing, continence care, dressing changes, care of open wounds/lesions or toileting. Feeding and pushing a wheelchair are not classified as direct care.

CHICKENPOX

The Basics:

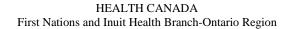
- Chickenpox is caused by the Varicella-Zoster Virus and is normally spread through the air or from direct contact with the fluid in the chickenpox blisters.
- Once a person has had chickenpox, they will not get it again (they are immune to chickenpox) but they could develop "shingles" (herpes zoster) later in life because the virus remains in their body.
- A person who is not immune to chickenpox could get chickenpox by direct contact with the virus that is present in the blisters of the shingles rash.
- Persons with "Disseminated Herpes Zoster" (shingles spread over a large area
 of their body) may also be able to spread the virus by the airborne route.

Mode of Transmission:

Airborne and direct contact

How to Prevent Spread:

- Health care providers must know their immune status for chickenpox.
- A chickenpox vaccine is available for staff who are not immune.
- Immune staff do not need to wear an N95 respirator.
- Health care providers should use Routine Practices, including a risk assessment prior to each client interaction. If direct contact with a rash is expected, gloves and gown may be worn.
- · Follow the 4 Moments for Hand Hygiene.
- Clean and disinfect equipment between uses on clients.



TUBERCULOSIS

The Basics:

- Tuberculosis is caused by a bacteria called Mycobacterium tuberculosis.
- Transmission requires prolonged, close contact with an individual who is actively infected with TB in the lungs.
- Most people who become infected never develop active disease but have "latent infection" that could become active if not treated.

Mode of Transmission:

Airborne

How to Prevent Spread:

- Consult with local public health unit about clients receiving care at home and the precautions needed.
- When Additional Precautions are needed, wear a fit-tested, seal-checked
 N95 respirator to enter the client environment, in addition to Routine Practices.
- Suggest the client wear a procedure mask while they are infectious.
- Encourage the client to contain respiratory secretions by covering their mouth or nose during coughing or sneezing.
- Use Routine Practices for care, including following the 4 Moments for Hand Hygiene and cleaning equipment according to manufacturer's instructions in between uses on clients.
- · Consult with local public health unit about discontinuation of precautions.

Reference: Masks and N95 Respirators on. Page 151- from

Public Health Agency of Canada (2013) Routine Practices and additional precautions for preventing the transmission of infection in healthcare settings. Retrieved from:

http://www.ipac-canada.org/pdf/2013_PHAC_RPAP-EN.pdf

Masks and N95 Respirators					
Type of Mask	Use	Advantages	Disadvantages		
Standard Face Mask ('procedure' mask or 'isolation' mask)	Mask >Minimal exposure to infectious droplets or >Short duration tasks	• inexpensive	Not fluid or water resistant		
Fluid Resistant Mask	Protection for: Heavy exposure to infectious droplets or blood/body fluids	Good comfort and fit Fluid resistant	Expensive		
Surgical Mask	Protection for: Exposure to infectious droplets or blood/body fluids Long duration tasks	Good comfort and fit Fluid resistant Inexpensive			
NIOSH- certified N25 respirator	Protection for airborne pathogens	Provides protection from small particle aerosols Better face seal prevents leakage around mask	Requires fit-testing, training and seal- checking Uncomfortable for long periods of use		

Adapted from Sunnybrook Health Sciences Centre, Patient Care Policy Manual Section II: Infection Prevention and Control [Policy No: II-D-1200, 'Gloves', Revised July, 2007 and London Health Sciences Centre, Occupational Health and Safety Services, 'Glove Selection and Use', Revised April 26, 2005.

C. Airborne Precautions in All Care Settings and Modifications for Specific Healthcare Settings

Airborne precautions should be used for the conditions/clinical presentations and specific etiologies listed in Table 8. In addition to routine practices for the care of all patients in all settings, the recommendations that follow Table 8 apply to the care of patients on airborne precautions in all care settings. Modifications for specific healthcare settings follow. Certain diseases require public health notification; check local regulations.

Table 8: Conditions/clinical presentations and specific etiologies requiring airborne precautions

Conditions/clinical presentation (See Table 9 for details)	Specific etiologies (See Table 10 for details)
risk for TB (pleuropulmonary or laryngeal TB) Rash, maculopapular with fever and one of coryza, conjunctivitis or cough Rash, vesicular with fever	Measles (rubeola) Monkeypox Tuberculosis (pleuropulmonary or laryngeal) • nonpulmonary lesions, during procedures that may aerosolize tuberculi bacilli Smallpox Varicella zoster virus • varicella (chicken pox) • zoster, disseminated • zoster in immunocompromised patient • zoster in immunocompetent patient that cannot be contained

Table 8 Conditions/clinical presentations and specific etiologies requiring contact precautions. from Public Health Agency of Canada (2013) *Routine Practices and additional precautions for preventing the transmission of infection in healthcare settings.* Retrieved from: http://www.ipac-canada.org/pdf/2013_PHAC_RPAP-EN.pdf p.81.

Antibiotic Resistance Organisms

Frequently Asked Questions for Patients and Caregivers Handout

1. What are antibiotic-resistant bacteria?

You have had a positive culture for a bacterium that cannot be treated easily with antibiotics. This type of bacteria is commonly known as **antibiotic-resistant bacteria**. Antibiotic-resistant bacteria will not make you any sicker than more common bacteria and are sometimes treatable with a combination of antibiotics and/or with newer kinds of medications.

In many cases, the body's own immune system is able to attach antibiotic-resistant bacteria to either rid them from the body or to keep them "in check" by not allowing them to grow to numbers that might lead to illness.

Healthy people are in no danger of becoming sick from antibiotic-resistant bacteria because their bodies are very good at fighting off *any bacteria* that are not common to their own bodies. People with chronic conditions, weakened immune systems (decreased ability to fight off disease), on long-term antibiotics, or who have many or lengthy hospitalizations are at risk for becoming sick with *any* of the bacteria that are typically in their surroundings.

2. Do I need to worry about taking this bacteria home to my family?

In most cases you do not need to use special precautions at home because most people have defenses that will not allow this bacteria to "take hold." If someone in your home has been on antibiotics for many weeks and also is immune-compromised, tell your health care provider, and he or she will tell you what you can do to prevent exposing this person to the resistant organism.

3. What precautions should family caregivers take for infected persons in their homes?

Outside of healthcare settings, there is little risk of spreading these bacteria to others; therefore, healthy people are at low risk of getting infected. In the home, the following precautions should be followed:

- Caregivers should wash their hands with soap and water or alcohol-based hand rub after physical contact with the infected or colonized person.
- Towels used for drying hands after contact should be used only once.

- Disposable gloves should be worn if contact with body fluids is expected, and hands should be washed before putting on gloves and again after removing gloves.
- Do not share personal products that are in contact with the skin; for example: deodorant, razors, toothbrushes, towels, nail files, combs and brushes

4. What are enterococci?

Enterococci are bacteria that live in the bowel. Enterococci can go to other parts of the body and cause an infection. Vancomycin is an antibiotic used to treat infection caused by enterococci. If bacteria are resistant to vancomycin it means that vancomycin will not treat the infection. When this happens it is called "vancomycin-resistant enterococci" or VRE.

5. Will I ever be rid of VRE?

Over time your normal bowel organisms may take the place of VRE. You may no longer be isolated when stool or rectal swabs are negative for VRE.

6. What is Staphlococcus aureus?

Staphylococcus aureus, or S. aureus, is a bacteria usually found on a person's skin and mucous membranes. It may cause infections on broken skin or wounds. Methicillin and Vancomycin are antibiotics used to treat infections caused by S. aureus. If S. aureus is resistant to Methicillin, it is called MRSA. If S. aureus is resistant to Vancomycin, it is called VRSA. This means that the infection may be more difficult to treat. If someone has a VRSA or MRSA infection, other antibiotics may be used.

7. Will I ever get rid of MRSA?

Over time your normal skin organisms may take the place of MRSA or VRSA and you will no longer be placed in precautions.

Management of AROs in Various Healthcare Settings

	Acute Care	Long Term Care	Out Patient	Community		
Hand	Use 4 moments for hand hygiene					
Hygiene						
	1. Before client/enviro	nment				
	2. Before aseptic proce					
	3. After body fluid exp					
	4. After client/ enviror	iment				
Gloves	Upon room entry	For direct care				
Gown	For direct client care o	r contact with client en	vironment			
*Mask and	** For direct care if client is symptomatic with an active ARI					
Eye						
Protection						
Precautions	Contact Precautions & Routine Practices					
	** Droplet and Contac	t Precautions & Routine	Practices if patient is sy	mptomatic with an		
	active ARI					
Equipment	Dedicated	Dedicated or clean	Clean and disinfect be	tween clients		
		and disinfect				
		between clients				

Notes: * Prescription eyeglasses are **not acceptable** as eye protection

Source: Adapted from St. Joseph's Healthcare Hamilton. (2011). Infection Prevention and Control: *Guidelines during Construction, Renovation and Maintenance in Healthcare Facilities.* Retrieved from: http://www.stjoes.ca/media/079-MED.pdf

^{**} For individuals with known MRSA **and** an active ARI (there is evidence that some individuals may act as "super-shedders" of MRSA when co-infected with a respiratory virus and can spread MRSA via respiratory droplets)



RISK ASSESSMENT, ROUTINE PRACTICES PLUS ADDITIONAL PRECAUTIONS

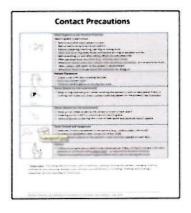
Take these precautions in addition to the protective actions listed in Routine Practices for Environmental Cleaning before you:

- a) start any environmental cleaning task
- b) have contact with client
- c) have contact with the client's environment

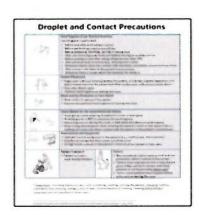
Ask the health care provider, if available, or your supervisor, "Does the client have a condition (such as the examples below) requiring Additional Precautions?"

- Coughing or sneezing due to a respiratory infection: wear a mask and eye protection within 2 metres (6 feet) of the client.
- Gastrointestinal infection (diarrhea or vomiting): wear a mask and eye protection when cleaning
 up vomit or feces.

If you see any signs posted on a door such as the ones below, DO NOT ENTER THE ROOM until you have asked the nurse for directions.







Cleaning Frequency Chart

SURFACE/OBJECT	HIGH	ГОИСН	LOW TOUCH SURFACES	
EXPOSURE	SURFACES			
CHARACTERISTICS	Those that have frequent		Those that have minimal contact	
	contact with h	ands	with hands	
	More Less		More	Less Susceptible
	Susceptible	Susceptible	Susceptible	Person 1
	Person 1	Person 1	Person 1	
Heavy Contamination:	HIGH RISK			
Surface/object routinely	Clean after		MODERATE	RISK
exposed to large amounts	each			
of fresh blood or other body	case/event/	Clean at least	once per day	
fluids	procedure	Clean addition	nally as require	d (e.g., visible
	and at least	soiling)		
	twice per			
	day			
	Clean			
	additionally			
	as required			
Moderate Contamination:		ODERATE RIS	SK	LOW RISK
Surface/object does not	Clean at least	~		Clean according to
routinely (but may) become		nally as require	d (e.g., visible	a fixed schedule
contaminated with blood or	soiling)			Clean additionally
body fluids, and the				as required (e.g.,
contaminated substances				visible soiling)
are contained or removed				
Light Contamination:	MODERATE	RISK	LOW RISK	
Surface/object are not			Clean accordi	ng to a fixed
exposed to blood, other	Clean at least		schedule	
body fluids or items that	Clean additionally as		Clean additionally as required	
have come into contact with	required (e.g., visible		(e.g., visible soiling)	
blood or body fluids The term were succeptible person refers to pe	soiling)			

₁The term *more susceptible person* refers to people who are susceptible to infection due to their medical condition or lack of immunity. *Less susceptible person* refers to all other individuals. The above Frequency Cleaning Chart has been adapted from the Provincial Infectious Diseases Advisory Committee (PIDAC) Best Practices for Environmental Cleaning for Infection Prevention and Control in all Health Care Settings, (May 2012), Appendix B pp. 134-135; and the FNIHB Operations and Management Manual p. 16

Suggestions for Management of Environmental Cleaning Human Resources

A. Assigning Adequate Human Resources:

The employer (FNIHB or band) overseeing health facilities should take into consideration the following factors when assigning adequate human resources

- Type of care provided at the health facility
 - Facilities providing emergency care e.g. trauma care, must be staffed accordingly to reflect more frequent cleaning needs as per the cleaning matrix (Refer to Appendix A: Cleaning Frequency Chart).
- Volume of Clients
- Frequency of Clients Being Seen That Require Additional Precautions
 - Extra time will be required to put on and remove PPE and more frequent cleaning will be required for some microorganisms
- Presence and Frequency of Outbreaks
- Building factors
 - Age of the facility older buildings are harder to clean
 - o Design of the facility e.g. amount of walking required to complete a task
 - Size of the facility
 - o Climate
 - Season
 - o Exposure of facility to outside dust and soil, e.g., construction site
 - o Type of floors and walls
 - o Presence of carpet and upholstered furniture

• Equipment Factors

- Type of cleaning tools/equipment available (e.g. automated floor cleaner vs. mop and bucket)
- Methodology required for cleaning (i.e. equipment, chemicals, materials and physical ergonomics)
- o Placement of housekeeping closets/utility rooms

Training Factors

- Amount and level of training given to new environmental cleaning personnel will influence supervisory levels
- o Auditing activities will influence supervisory human resource levels

- Previous environmental cleaning experience (inexperienced workers will work slower than experienced workers)
- Legislative Requirements
 - o Amount of regulatory responsibility a supervisor may have

B. IPAC Recommendations for Managing Environmental Cleaning Human Resources:

In order to meet environmental cleaning best practices, it is strongly recommended that the employer include all of the following IPAC recommendations for their respective health care facilities.

- One individual should be assigned to the overall responsibility of the physical care of the health facility.
- This individual should review the written policies and procedures for cleaning and disinfection of the client areas and equipment as per the *FNIHB-OR Environmental Cleaning Procedure Manual* upon hire of each new environmental cleaner and at minimum annually thereafter.
- Written procedures for cleaning and disinfection should include all of the following items
 - Supervision of cleaning personnel by those who are trained and knowledgeable in cleaning standards and practices
 - o Adequate human resources to allow thorough and timely cleaning and disinfection
 - Clearly defined lines of accountability
 - Orientation and annual education and continuing education on Infection Prevention and Control, including Routine Practices, Additional Precautions, Hand Hygiene, proper donning and doffing of PPE for all environmental cleaning personnel
 - Orientation and annual WHMIS education and review of safe handling of chemicals, including proper use of, handling, use of PPE, and disposing of chemicals.
 - o Responsibility for specific items and areas
 - o Procedures for daily cleaning and disinfection
 - Priority for cleaning given to client care areas rather than to administrative and public areas
 - o Procedures for cleaning and disinfection standards and frequency
 - o Procedures for cleaning in construction/renovation areas
 - Ongoing review of policies and procedures
 - Monitoring of environmental cleanliness through periodic audits and results reported back appropriately to become a part of the employee's performance review; aggregate results need to be reviewed by facility management

- Job descriptions for general cleaning should clearly outline the infection control-related responsibilities. These should not only include the environmental cleaning procedures, but also the employer's responsibility for employee health and mandatory training.
- There should be clear expectations regarding the levels of cleaning frequency and standards.
- There should be recognition that ever-changing cleaning protocols may potentially impact on the time for proper cleaning and human resources may need to be periodically reassessed.
- The Occupational Health and Safety (OH&S) policies of the employer should be consistent with those of PIDAC as they relate to Infection Prevention and Control (IPAC), including:
 - Immunization of environmental cleaners (including Hepatitis B and annual influenza vaccination and other routine immunizations as recommended by the National Advisory Committee on Immunization (NACI)
 - Transparent sharing of information related to work place exposure incidents
 - Access to staff health policies and measures related to Additional Precautions

REFERENCES:

First Nations Inuit Health Branch – Ontario Region. (2013). *Environmental Cleaning Procedure Manual*. Retrieved from

https://www2.one health.ca/on/PublicHealthUnit/CommunicableDiseaseHome/InfectionPrevention and Control.aspx

Friedman, C., & Petersen, K. H. (2004). Infection control in ambulatory care. Sudbury, MA: Jones and Bartlett Publishers.

Public Health Ontario. (2013). Environmental cleaning toolkit. Retrieved from http://65.109.242.181/manualsandtoolkitsc3462.php

Public Health Ontario. (2010). Infection Prevention and Control Resource Manual for Residential Hospice Settings. Retrieved from http://www.ontla.on.ca/library/repository/mon/25001/307210.pdf

Public Health Ontario. (2012). Best Practices for Environmental Cleaning for Prevention and Control of Infections in all Health Care settings. 2nd edition. Retrieved from http://www.publichealthontario.ca/en/eRepository/Best_Practices_Environmental_Cleaning_201 2.pdf

Cleaning and Disinfection Decision Chart for Non-critical Equipment

The following chart relates to **non-critical patient care equipment** only, i.e., equipment that comes into contact with intact skin. For semi-critical and critical equipment that requires high level disinfection or sterilization, see the Ministry of Health and Long-term Care's *Best Practices for Cleaning, Disinfection and Sterilization in All Health Care Settings*.

Level of Cleaning and Disinfection Classification of Equipment/Device	Classification of Equipment/Device	Effective Products
Cleaning Physical removal of soil, dust or foreign material. Chemical, thermal or mechanical aids may be used. Cleaning usually involves soap and water, detergents or enzymatic cleaners. Thorough cleaning is required before disinfection or sterilization may take place.	All reusable equipment/devices	Concentration and contact time are dependent on manufacturer's instructions
Level of disinfection required when processing noncritical equipment/devices or some environmental surfaces. Low-level disinfectants kill most vegetative bacteria and some fungi as well as enveloped (lipid) viruses. Low-level disinfectants do not kill mycobacteria or bacterial spores.	Non-critical equipment/devices	Concentration and contact time are dependent on manufacturer's instructions - 3% Hydrogen peroxide (30 minutes) - 70-95% Alcohol (10 minutes) - Sodium hypochlorite (bleach) (1000 ppm) - 0.5% Hydrogen peroxide enhanced action formulation (HP-EAF) (5 minutes) - Quaternary ammonium compounds (QUATs) - Iodophors - Phenolics (should not be used in nurseries or equipment that comes into contact with infants such as scales)

The following chart relates to **non-critical patient care equipment** only, i.e., equipment that comes into contact with intact skin. For semi-critical and critical equipment that require high level disinfection or sterilization, see the Ministry of Health and Long-term Care's *Best Practices for Cleaning, Disinfection and Sterilization in all Health Care Settings*. Refer to Appendix F for appropriate agents that may be used for cleaning and disinfection of non-critical patient care equipment.

This chart also includes **environmental surfaces and items** that do not come into contact with skin. Refer to Section III and Appendix E for guidance regarding cleaning, disinfection of environmental surfaces and items.

Item	Minimum Cleaning and Disinfection Level: CL=Clean only HLD= Clean + High-level Disinfection LLD = Clean+ Low-level	Minimum Frequency	Remarks	Responsible for Cleaning HCW = Health Care Worker ECW = Environmental Cleaning Worker
Arrest Cart	Disinfection See Resuscitation Cart			HCW
Basin (Bath or Wash)	LLD	• After each use	Dry completely before use	HCW

Item	Minimum Cleaning and Disinfection Level: CL=Clean only HLD= Clean + High-level Disinfection LLD = Clean+ Low-level Disinfection	Minimum Frequency	Remarks	Responsible for Cleaning HCW = Health Care Worker ECW = Environmental Cleaning Worker
Bassinette	LLD	WeeklyWhen soiledBetween newborns		HCW
Bed				
Bedrail and extender	LLD	• Daily		ECW
Mattress	LLD	 Clean between patients and when soiled 		ECW HCW – if soiled
Visitor cot	LLD	Change linen and clean between uses		ECW
Bedpan and Urinal				
Single Patient	CL	 Clean after each use if designated to client 	 Remove gross soil and fluids before cleaning 	HCW
Between patients	LLD	Between clients	 Remove gross soil and fluids before cleaning 	HCW
Blood Pressure Cuff	LLD	Between clientsWhen soiled		HCW
Cardiac Monitor	LLD	Daily and between clients		HCW

Item	Minimum Cleaning and Disinfection Level: CL=Clean only HLD= Clean + High-level Disinfection LLD = Clean+ Low-level Disinfection	Minimum Frequency	Remarks	Responsible for Cleaning HCW = Health Care Worker ECW = Environmental Cleaning Worker
Cast Cutting Blades Saws	CL or disposable	When soiledWhen soiled	Send for sterilization if contact with blood or body fluids	HCW HCW
Chair Includes recliners, and clinic chairs and sofa	LLD	Daily and when soiled		ECW
Chart Cover Binder and/or clipboard	LLD	• When soiled	 Charts and clipboards should not go into rooms on Additional Precautions 	HCW
Clippers Surgical	LLD	Between clients	 Disposable heads are preferred 	HCW
Item	Minimum Cleaning and Disinfection Level: CL=Clean only HLD= Clean + High-level Disinfection LLD = Clean+ Low-level Disinfection	Minimum Frequency	Remarks	Responsible for Cleaning HCW = Health Care Worker ECW = Environmental Cleaning Worker

Commode Chairs				
Single client use	LLD	• When soiled	 Ideally dedicated to each client Clients with VRE or <i>C. difficile</i>, must have dedicated commode For <i>C.difficile</i>, consider cleaning with a sporicidal agent Remove gross soil and fluids before cleaning and disinfection 	ECW
Multiple patient use	LLD	When soiled Between clients	 Remove gross soil and fluids before cleaning and disinfection 	HCW
Defibrillator				
	See Resuscitation cart			HCW
Diagnostic Imaging				
Portable-Machine	LLD	When soiled and on leaving Contact Precautions room		HCW
Portable-portable grid/film cassette	LLD	Between clients if not covered	Ideally should be covered (e.g., pillowcase cover)	HCW
Item	Minimum Cleaning and Disinfection Level: CL=Clean only HLD= Clean + High-level Disinfection LLD = Clean+ Low-level Disinfection	Minimum Frequency	Remarks	Responsible for Cleaning HCW = Health Care Worker ECW = Environmental Cleaning Worker

Dopplers Transducers	LLD	After each use	Wipe immediately after use to remove residual ultrasound gel before cleaning	HCW
Probes	HLD	• After each use	 Probes that contact mucous membranes or non-intact skin require high level disinfection 	HCW
ECG	110	. Datuman alianta		HCW
Machine and Cables Examination Table	LLD	Between clients Between clients and		HCW
		when soiled • Daily cleaning		ECW
Glucometer	LLD	• After each use		HCW
Hydraulic Lift Machine	LLD	• As required		ECW
Sling	Launder	Between clients and when soiled	Dedicated to client if possibleLaunder if visibly soiled	ECW
Intravenous (IV) Pumps, Poles, Warmers	LLD	Between clients When soiled		HCW
Item	Minimum Cleaning and Disinfection Level: CL=Clean only HLD= Clean + High-level Disinfection LLD = Clean+ Low-level Disinfection	Minimum Frequency	Remarks	Responsible for Cleaning HCW = Health Care Worker ECW = Environmental Cleaning Worker
Isolette	LLD	Weekly When soiled		ECW HCW

Laryngoscope				
Handle	LLD	. Datuman allanta		HCW
Blade	HLD	Between clients		TIOVV
		Between clients		
Mattress	See Bed			
Managerina Comtainer				
Measuring Container				
(urine)	CL	After each use		HCW
Single client use	CL	• After each use		11000
Multiple client use	LLD	After each use	One container per client,	
ividitiple client use		• Arter each use	labelled with name	HCW
Ophthalmoscope	LLD	Between clients	labelled with hame	HCW
Ориталиозсорс		• between chefits		11000
Orthopedic Equipment				
Crutches, traction, etc	LLD	Between clients		ECW
		Between cherits		
Otoscope				
Handle	LLD	 Between clients 		HCW
Ear Speculum	Disposable or HLD	 Between clients 		HCW
	and the second	B.41	D	December 11 to 1 Character
Item	Minimum Cleaning and	Minimum	Remarks	Responsible for Cleaning
	Disinfection Level:	Frequency		HCW = Health Care Worker
	CL=Clean only HLD= Clean + High-level			HCW = Health Care Worker
	Disinfection			ECW = Environmental Cleaning
	LLD = Clean+ Low-level			Worker
	Disinfection			VVOINCI
Oximeter Probes	LLD	Daily and between	• If single –use, discard after	
C.ameter 1 100C3		clients	use	
		Silerito	Refer to manufacturer's	HCW
			instructions for cleaning	
			stractions for cicaring	

Pillow	LLD	Between clients and when soiled	Inspect for cracks and discard as required	HCW
Reflex Hammer	LLD	Between clients		HCW
Restraints	Launder	Between clients and when soiled	Launder	ECW
Resuscitation Cart/Arrest Cart	LLD	Weekly and after use	Avoid taking cart into Contact Precautions room, have a designated clean	HCW
			person to pass supplies as required	HCW
Defibrillator	LLD	• After each use	All items taken into Contact Precautions room must be	HCW
Trays	LLD	• After each use	discarded and not returned to the cart, even if unopened	
			Recommend clear cover if not in use	
Item	Minimum Cleaning and Disinfection Level: CL=Clean only HLD= Clean + High-level Disinfection LLD = Clean+ Low-level Disinfection	Minimum Frequency	Remarks	Responsible for Cleaning HCW = Health Care Worker ECW = Environmental Cleaning Worker
Scales Adult	LLD	Daily and when		HCW
Diaper	LLD	soiled • After each use		HCW
Newborn	LLD	• After each use		HCW

Stretcher	LLD	After each use between clients		HCW
		After single client		ECW
Stethoscope	LLD	After each use	Ideally use own stethoscopeIf shared, disinfect ear pieces	HCW
Suction Machines	LLD	Between clientsWhen soiled		HCW
Table				- O.W.
Bedside	LLD	• Daily		ECW
Over Bed		When soiledBetween clients		HCW
Telementry Equipment Monitor and Cables (e.g., Holter Monitor)	LLD	Between clientsWhen soiled		HCW
Tourniquet	LLD.	Between clients or disposable	Discard when soiled/cracked	HCW
Transfer Boards	LLD	Between clientsWhen soiled		ECW HCW
Item	Minimum Cleaning and Disinfection Level: CL=Clean only HLD= Clean + High-level Disinfection LLD = Clean+ Low-level Disinfection	Minimum Frequency	Remarks	Responsible for Cleaning HCW = Health Care Worker ECW = Environmental Cleaning Worker
Transport Equipment Stretcher Walker Crutches Wheelchair	LLD	Between clients When soiled		ECW HCW
Tub Bath chair	LLD	• After each use		ECW

Ultrasound Transducers Handle and Cable External	LLD	Between Clients	 Use high-level disinfection for transducer probes if they touch mucous membranes or non-intact skin Recommend cover if not in use 	HCW
Urinal	See bedpan			
Urine Measuring	See Measuring			
Container	Container			
Vacutainer Holder	Single Patient Use			HCW
Walker	See Transport Equipment			
Wall-mounted Oxygen	LLD	Between Clients		HCW
and Suction Fixtures		When soiled		
Water Jug	CL	• Daily	Clean in dishwasher if available	ECW
Wheelchair	See Transport			
	Equipment			

Disposal Streams for Biomedical and General Waste

Waste Category	Colour Code	Examples	Disposal
Anatomical waste	Red	Tissues, organs, body parts	Incineration Must be peckaged in a
		Note: Medical supplies used in the provision of care of infectious diseases categorized as Category A under the TDG regulations (for	Must be packaged in a sealed, impervious container that is refrigerated or frozen until disposal Must never be kept
		example: viral hemorrhagic fever) are to be disposed as biomedical waste.	longer than one week
Microbiologic waste	Yellow	Diagnostic specimens, cultures, vaccines	Incineration, <i>or</i>
			Treatment that is capable of inactivating spores (e.g., autoclave), then landfill
Fluid waste	Yellow	Drainage collection units and suction containers contents, blood, blood products, bloody body fluids and other materials that will release liquid or semi- liquid blood if compressed	Sanitary sewer if permitted by municipal bylaws, <i>or</i> Incineration, <i>or</i> Treatment that is capable of inactivating spores (e.g., autoclave), then landfill
Hazardous or Cytotoxic	YELLOW	Hazardous Medication type 1 or 2, medication cups, syringes, gloves, gowns used when administering this medication. For clients on hazardous medication type 2 – disposable items soiled with body fluids (briefs, gloves, gowns, mask with visors, dressings, urinary bags, etc)	Incineration

Sharps	Yellow <i>or</i> Red if incinerated Red sharps containers for hazardous medication sharps	Needles, syringes, lancets, blades, clinical glass	Incineration, <i>or</i> Treatment that is capable of inactivating spores, then landfill Or in accordance with municipal / regional regulations.
General waste	Green, black or clear	Dressings, sponges, diapers, incontinent pads, PPE disposable drapes, dialysis tubing and filters, empty IV bags and tubing, catheters, empty specimen containers, lab coats and aprons and pads that will not release liquid or semiliquid blood if compresses Isolation waste from Contact, Droplet and Airborne Precautions rooms Waste from offices, kitchens, washrooms, public areas	Landfill

Source: PIDAC: Best Practices for Environmental Cleaning for Prevention and Control of Infections, May 2012.

Documentation for Transportation of Reusable Medical Devices for Off-Site Reprocessing

PART A: TO BE COMPLETED BY FNIHB HEALTH FACILITY SENDING ITEMS FOR REPROCESSING

Date items sent for reprocessing: (dd/mmm/yyyy)					
Name of FNIHB Health Facility sending items:					
	I				
Time Sent to Airport/Courier (if applicable):					
Flight number: Flight d	eparture time:				
	-	•			
Name of Medical Device	Quan	tity	Signature of FNIHB Staff Member		
PART B: TO BE COMPLETED BY TH	IRD PARTY FACILIT	Y UPON RECEI	PT OF ITEMS FOR REPROCESSIING		
	_				
Date items received for reprocessi	ng:				
(dd/mmm/yyyy)					
Name of third party person receiv	ing items:				
(PLEASE PRINT)					
(. ==:)					
PART C: TO BE COMPLETED BY TH	IRD PARTY FACILIT	Y WHEN SEND	ING ITEMS BACK TO FNIHB HEALTH		
FACILITY					
TAGLIT					
Date reprocessed items sent back	to health				
facility: (dd/mmm/yyyy)	to ilcartii				
Name of third party staff member	conding				
reprocessed items: (PLEASE PRINT	_				
-	·				
Time Sent to Airport/Courier (if ap	oplicable):				
Flight number: Flight o	departure time:				
Name of Medical Device	Quantity		Signature of Third Party		
			Reprocessing Staff Member		
COMMENTS OR CONCERNS REGAR	RDING ITEMS:				