Section I - Infection Prevention and Control Program

LTCHs and RHs should develop and maintain an Infection Prevention and Control program that provides a safe, sanitary, and comfortable environment to help prevent the development and transmission of infections.

This program should:

- Obtain and manage critical data and information, including surveillance for infections.
- Develop and recommend policies and procedures.
- Intervene directly to prevent and control infections.
- Educate and train health care workers, patients and non medical caregivers.
- Ensure compliance with specific protocols, and guidelines created from Best Practices.
- Be monitored by an Infection Prevention and Control Committee (IPCC) at quarterly Infection Prevention and Control meetings.[2]

General Infection Control Concepts

1. Infection surveillance will be either "whole-house" (i.e. include all residents), or targeted (i.e. toward high risk/high volume). Data should be reported internally on a monthly, quarterly, or other basis (as indicated by the IPCC).
2. A "nosocomial infection" will be defined as any infection that is not present or incubating at the time of admission.
3. "Community-acquired" will be defined as any infection present or incubating at the time of admission.
4. Any infection that demonstrates itself within 72 hours of admission will be considered a "community-acquired infection".
5. "Chronic infections" are defined as those present at the same site for a period greater than 3 months. These infections will be monitored as all other infections; however, they will be designated as chronic in monthly reports and other statistics, and will only be counted in the month identified.
6. "Critical" definitions of infection will be approved by the IPCC and utilized by the IPCP in determining infection rates.
7. An assessment of risk for infection in residents and staff will be performed annually.
8. Environmental cultures will be obtained only if a problem area is identified, or at the direction of federal, provincial or local health unit authorities.
9. Resident cultures will be performed according to facility policy or at the direction of the resident's attending physician and/or federal, provincial, or local health unit authorities.[3]

Definition of Direct Care

This is the direct quote from the PIDAC MRSA doc. March 2007; it was retrieved to add to the LTC manual glossary for clarification regarding a definition of "direct care".

Direct Care: Providing hands-on care, such as bathing, washing, turning client/patient/resident, changing clothes/diapers, dressing changes, care of open wounds/lesions or toileting.

Feeding and pushing a wheelchair are not classified as direct care.

Reference

Ontario Ministry of Health and Long-Term Care Best Practices for Infection Prevention and Control of Methicillin-Resistant Staphylococcus Aureus and Enterococci in All Health Care Settings. 2007

http://www.health.gov.on.ca/english/providers/program/infectious/diseases/best_prac/bp_staff.pdf

The Infection Prevention and Control Professional (IPCP)

The IPCP, under the direction of the IPCC, is responsible for the quality of resident care as it relates to the investigation, control and prevention of infections. It is important to have one staff member designated as the IPCP for the facility in order to coordinate the Infection Prevention and Control Program. Included below are some of the duties conducted by the IPCP:

- Perform surveillance required to identify individual infections in residents and staff, and to identify clusters of infection, in a timely manner.
- Track trends in infection within the facility, and report specific infections/clusters to appropriate staff as well as the MOHLTC and the SMDHU.
- Identify infection control issues and make recommendations for corrective action.
- Participate as a member of the IPCC.
- May prepare the agenda and chair the IPCC meetings.
- Monitor infection control practices and employee compliance.
- Develop and revise infection prevention and control policies and procedures, and maintain the (IPC manual) for all departments.
- Conduct outbreak investigations and initiate control measures.
- Provide orientation and continuing education related to infection control for all staff.
- Provide infection control consultation to all departments.
- Actively participate in quality improvement programs.
- Participate in educational programs for personal professional development.
- Review outbreak preparedness within the facility, and obtain supply of culture kits.
- Monitor resident-care practices (i.e. hand washing, routine practices and additional precautions, dressing techniques, and perineal/catheter care).
- Monitor the quantity and accessibility of employee personal protection equipment (PPE) and ensure the appropriate use and maintenance of PPE.
- Identify, follow up, and monitor residents with known or suspected infection.
- Monitor IVs and the IV Program: practices and outcomes as well as staff training.
- Monitor antibiotic use.
- Review all culture reports and resident lab data, and report communicable diseases as required by MOHLTC and the SMDHU.
- Monitor Occupational Health and Safety (OHS) programs (hepatitis B vaccination, needle stick and TB program).
- Prepare monthly statistics and distribute to administration, DOC, DON, and others as requested. Also present at quarterly IPC meetings to the IPCC.
- Review infection control program yearly to assess whether it is functioning as well as possible.
- When possible use the internet for **timely** infection control resources and **up-to-date** MOHLTC directives, guidelines, policies, protocols, and best practice documents.
- Be involved in projects for new construction or renovations, and conduct daily rounds during these projects.[2]

The Infection Prevention and Control Committee

Each health care facility should have its own Infection Prevention and Control Committee (IPCC).The purpose of the Committee is to give structure and administrative power to the Infection Prevention and Control Program, and to provide a means of communication for all parties involved.

Terms of Reference

The IPCC membership is composed of, but not limited to, the following:

- Infection Prevention and Control Professional (IPCP)
- Chair (if not the IPCP)
- Medical Advisor
- Administration
- Nursing Supervisor
- Pharmacy
- Environmental Services
- Dietary Services
- Laboratory (if on-site)
- Employee Health
- OHS
- The Medical Officer of Health (MOH) or designate from the SMDHU

The IPCC should meet quarterly, or as needed, and will make recommendations for appropriate maintenance of a safe, sanitary and comfortable environment for the residents and staff to prevent the development and transmission of disease and infection.

The IPCC should develop and approve policies and procedures for all aspects of the Infection Prevention Control Program, review reported infections and incidents, and aid in determining appropriate corrective action.

Written reports of all committee meetings should be maintained and made available to all departments for review. These records should be retained and utilized for retrospective study.

SMDHU representation on the IPCC will establish good communication channels between the health unit and the facility. The health unit is committed to providing consultation and support to all aspects of the facility infection prevention and control program.

As directed by their manager/supervisor under the guidance of the IPCP/IPCC, staff members have the responsibility of implementing and adhering to infection prevention and control policies and procedures within the facility, such as hand washing and personal hygiene.

Sample Agenda – Infection Prevention and Control Committee

(Insert Facility Letterhead)

Infection Prevention and Control Committee Meeting Agenda

Date:_____ Time: _____ Place: _____

I. Meeting called to order

II. Approval of previous meeting minutes

III. Business arising from the previous minutes

IV. Communications from regulatory agencies or recalls

V. Medical Advisory report

VI. Infection Control report

VII. Laboratory /Microbiological report

VIII. Employee Health report

IX. New business

X. New policies/procedures

XI. Annual review of policies/procedures

XII. Simcoe Muskoka District Health Unit report

XIII. Adjournment

XIV. Next Meeting

Infection Prevention and Control

What is an Infection?

An infection is the invasion of pathogenic (disease–causing) microorganisms (germs) into body tissues. The result may be clinically unapparent, or there may be symptoms such as fever, redness, swelling, or pain in the affected area. Sometimes, the disease may spread beyond the initially affected area.

A health-care-facility-related infection (nosocomial infection) is an infection that is acquired during the resident's stay in the facility, and which was not present or incubating upon admission. Community-acquired infection is any infection present or incubating at the time of admission. It is the responsibility of all employees to know and practice infection prevention and control measures. Before prevention measures can be adequately put into effect, all employees must be aware of the infection cycle.

The Six Elements of Infection

There are six elements in the cycle of infection, and all six must be present before the transmission of infection can take place.

Element in the cycle of infection	Explanation	Common examples
Infectious Agent	When germs enter the body, they can cause illness, especially in the elderly whose immune system is less responsive	• Bacteria, virus, fungi, protozoa
Reservoir	Where germs normally live and multiply	• Humans (i.e. residents/staff already infected) • Contaminated food, water, and equipment • Insects, animals, soil
Portal of Exit	How germs leave the body	• Respiratory tract • Intestinal tract • Urinary/genitourinary tract • Open wounds • Blood and body fluids
Transmission	How germs are spread	• Direct contact • Respiratory droplet • Body fluid splashes • Indirect contact • Needle stick Injury • Ingestion of contaminated food and water • Contaminated dust particles and equipment • Insects/animals
Portal of Entry	How germs enter the body	• Respiratory tract • Intestinal tract • Urinary/genitourinary tract • Open wounds • Mucus membrane, e.g. eye, mouth
Susceptible Host	A person who gets an infection because he/she is unable to successfully fight the infection	• Infants, elderly and debilitated • Persons who are ill • Persons who are taking certain drugs that lower their defense against germs • Persons with underlying disease conditions that lower their defense against other germs

How to Prevent the Infection: Breaking the Cycle

Studies have shown that breaking the transmission phase of the cycle is one of the most effective ways to prevent infection. The best way to break the transmission phase is thorough and frequent hand washing, and good personal hygiene.

Personal Hygiene

Good personal hygiene is extremely important in preventing the spread of pathogens. All employees should practice the following:

- Shower or bathe daily.
- Keep nails neat and trimmed.
- No nail polish or false nails.
- Jewelry should be kept to a minimum.
- Wear a clean uniform daily (Change prior to leaving the facility and between facilities).

McGeer's Definitions of Infection [3]

Dr. Allison McGeer is the Director of Infection Prevention & Control at Mount Sinai Hospital in Toronto, Ontario.

Principles

- The definitions presented here are not all-inclusive.
- They focus on infections for which surveillance is expected to be useful (i.e. infections that are common and can be acquired and detected in the facility).
- Three important conditions apply to all of the definitions:

1. All symptoms must be new or acutely worse. Many residents have chronic symptoms, such as cough or urinary urgency that are not associated with infection; however, a change in the resident's status is an important indication that an infection may be developing.
2. Noninfectious causes of signs and symptoms should always be considered before a diagnosis of infection is made.
3. Identification of infection should not be based on a single piece of evidence. Microbiological and radiological findings should be used only to confirm clinical evidence of infection. Similarly, a physician diagnosis should be accompanied by compatible signs and symptoms of infection.

Upper Respiratory Tract Infection (URTI)

Common cold syndromes/pharyngitis: The resident must have at least 2 of the following:

- runny nose/sneezing
- stuffy nose/congestion
- sore throat/hoarseness difficulty in swallowing/dry cough
- swollen or tender glands in the neck (cervical lymphadenopathy)

Comment: Fever may or may not be present. Symptoms must be new, and care must be taken to ensure that they are not caused by allergies.

Influenza-like illness: Both of the following criteria must be met:

- Fever (38°C)

The resident must have at least three of the following signs or symptoms:

- chills
- new headache or eye pain
- myalgias
- malaise or loss of appetite
- sore throat
- new or increased dry cough

Comment: This diagnosis can be made only during influenza season.

Lower Respiratory Tract Infections (LRTI)

Pneumonia: Both of the following criteria must be met:

- Interpretation of a chest radiograph as demonstrating pneumonia, probable pneumonia, or the presence of an infiltrate. If a previous radiograph exists for comparison, the infiltrate should be new.
- The resident must have at least two of the signs and symptoms described under ''other lower respiratory tract infections.''

Comment: Noninfectious causes of symptoms must be ruled out. In particular, congestive heart failure may produce symptoms and signs similar to those of respiratory infections.

Other (LRTI) bronchitis, tracheobronchitis:
The resident must have at least three of the following signs or symptoms:

- new or increased cough
- new or increased sputum production
- fever (38°C)
- pleuritic chest pain
- new or increased physical findings on chest exam (rales, rhonchi, wheezes, or bronchial breathing)
- one of the following indications of change in status or breathing difficulty: new/increased (SOB), or respiratory rate >25/min, or worsening mental or functional status

Comment: This diagnosis can be made only if no chest film was obtained or if a radiograph failed to confirm the presence of pneumonia.

Copied with permission. Courtesy of Allison McGeer.

Urinary Tract Infections (UTI)

Includes only symptomatic (UTI). One of the following criteria must be met:*

The resident does not have an indwelling urinary catheter and has at least three of the following signs and symptoms: • fever (38°C) or chills, • new or increased burning pain on urination, frequency or urgency • new flank or suprapubic pain or tenderness • change in character of urine • worsening of mental or functional status (may be new or increased incontinence).	The resident has an indwelling catheter and has at least two of the following signs or symptoms: • fever (38°C) or chills • new flank or suprapubic pain or tenderness • change in character of urine • worsening of mental or functional status **Comment:** * It should be noted that urine culture results are not included in the criteria. Change in character may be clinical (e.g., new bloody urine, foul smell, or amount of sediment), or as reported by the laboratory (new pyuria or microscopic hematuria). For laboratory changes, this means that a previous urinalysis must have been negative.

Eye Infections

Must not be due to allergy or trauma to the conjunctiva.

Conjunctivitis: One of the following criteria must be met:

- Pus appearing from one or both eyes, present for at least 24 hours.
- New or increased conjunctival redness, with or without itching or pain, present for at least 24 hours.

Comment: Symptoms must not be due to allergy or trauma to the conjunctiva.

Ear infection

One of the following criteria must be met:

- Diagnosis by a physician of any ear infection.
- New drainage from one or both ears. (Non-purulent drainage must be accompanied by additional symptoms, such as ear pain or redness.)

Mouth and Peri-Oral infections

- Including oral candidiasis must be diagnosed by a physician or a dentist.
- Sinusitis: The diagnosis of sinusitis must be made by a physician.

Skin infections

Cellulitis/soft tissue/wound infection: One of the following criteria must be met: 1. The resident must have four or more of the following signs or symptoms: • fever (38°C) • heat • redness • swelling • tenderness or pain • serous drainage 2. Pus present at a wound, skin, or soft tissue site.	**Fungal skin infection:** The resident must have both: • a maculopapular rash • either physician diagnosis or laboratory confirmation.
Herpes simplex and herpes zoster infection: For a diagnosis of cold sores or shingles, the resident must have both: • a vesicular rash • either physician diagnosis or laboratory confirmation.	**Scabies** The resident must have both: • a maculopapular and/or itching rash • either physician diagnosis or laboratory confirmation. **Comment:** Care must be taken to ensure that rash is not an allergic reaction or secondary to skin irritation.

Copied with permission. Courtesy of Allison McGeer.

Gastrointestinal Tract Infection (GTI)

Rule out noninfectious causes of symptoms (i.e. new medications).
One of the following criteria must be met:

Two or more loose or watery stools above what is normal for the resident within a 24-hour period.	Two or more episodes of vomiting in a 24-hour period.	Both of the following: • A stool culture positive for a pathogen (Salmonella, Shigelloses, *E. coli* O157:H7, Campylobacter); or a toxin assay positive for *C. difficile* toxin. • At least one symptom or sign compatible with gastrointestinal tract infection (nausea, vomiting, abdominal pain or tenderness, diarrhea).

Systemic Infections

Primary bloodstream infection: One of the following criteria must be met:

- Two or more blood cultures positive for the same organism.
- A single blood culture documented with an organism thought not to be a contaminant, and at least one of the following:
  - fever 38℃ or hypothermia < 34.5℃
  - drop in systolic blood pressure of 30 mmHg from baseline
  - worsening of mental or functional status

Comment: Bloodstream infections related to infection at another site are reported as secondary bloodstream infections, and are not included as separate infections.

Fever of Unknown Origin (FUO)

The resident must have documentation in the medical record of fever (38℃) on two or more occasions at least 12 hours apart in any 3-day period, with no known infectious or noninfectious cause.

Copied with permission. Courtesy of Allison McGeer.

Principles of Transmission of Microorganisms

Disease-causing microorganisms (pathogens) are transmitted by many different routes within health care settings.

Contact Transmission

Direct contact transmission occurs when a person acquires pathogens from physical contact with an infected or colonized person directly without an intermediate contaminated object or person. Examples include:

- Blood or body fluids from an infected person enters a susceptible person's body through contact with a mucous membrane or breaks in the skin.
- Mites from a scabies-infested person to another person through ungloved contact with the skin.
- A HCW develops herpetic whitlow on a finger after providing oral care to a resident without using gloves.

Indirect contact transmission involves the transfer of pathogens through a contaminated object or person. Examples include:

- HCWs' hands may transmit pathogens after touching an infected person or body fluids or a contaminated object, then touch another person without decontaminating or washing hand.
- Resident-care devices (e.g. thermometers, glucose monitoring devices) shared between residents without cleaning and disinfecting in-between.
- Shared activity equipment may become vehicles for transmitting pathogens.
- Clothing, uniforms, gowns used as personal protective equipment may be contaminated after caring for an infected or colonized resident, creating the potential to transfer the pathogens to successive residents.

Some pathogens spread by direct and indirect contact are: rotavirus and Norovirus (also via aerosol), hepatitis B virus, respiratory syncytial virus (RSV), herpes simplex viruses, *Clostridium difficile*, *Staphylococcus aureus* (including Methicillin-Resistant strains – MRSA), and Vancomycin-Resistant Enterococcus (VRE). Additional precautions will be warranted when entering a resident's room.

Droplet Transmission

Droplet transmission occurs through large droplets, generally over five microns in diameter, coming from an infected person's respiratory tract during coughing, sneezing, talking, or during procedures such as suctioning, endotracheal intubation, cough induction by chest physiotherapy and cardiopulmonary resuscitation. These droplets carrying pathogens are propelled a short distance in the air before coming in contact with the mucus membrane of the nose, eyes, and less often the mouth, of a susceptible person. Large droplets do not remain suspended for long, or they lose their infectivity over long distances, so special ventilation is not required. A distance of under 3 feet around the source used to be defined as the area of risk. Recent studies suggest that droplets could reach persons located 6 feet or more from their source.

Some pathogens transmitted by droplets are: influenza virus, adenovirus and rhinovirus (cold viruses), SARS-associated coronavirus (SARS-CoV), *Bordetella pertussis* (whooping cough), group A streptococcus, *Neisseria meningitides, Mycoplasma pneumoniae,* rubella, parainfluenza virus, and RSV.

Airborne Transmission

Airborne transmission occurs by spreading of airborne droplet nuclei (particles arising from desiccation of suspended droplets) or small particles in the respirable size range containing pathogens that remain infective over time and distance. Airborne particles fewer than 100 microns can remain suspended in air when air current speeds exceed the settling speed of the particles. Pathogens may be inhaled by susceptible persons some distance away. Special air handling and ventilation systems to contain and safely remove the pathogen are required.

Pathogens of concern include *Mycobacterium tuberculosis*, varicella-zoster virus (chickenpox), localized herpes zoster (shingles) until disseminated infection is ruled out, rubeola virus (measles), variola virus (smallpox – more often spread by droplet and contact but possibly airborne), and *Aspergillus* spores.

Other Mechanisms of Transmission

Pathogens can also come from the environment. For example, *Aspergillus* spores (e.g. via construction dust) inhaled from the environment may cause disease in immunocompromised persons. Legionella from a common aerosol source can cause respiratory infection when inhaled. Please refer to “Construction-related Nosocomial Infections in Patients in Health Care Facilities”, in Canada Communicable Disease Report, July 2001, Volume 27S2 for specific infection prevention and control measures. Insects, rats and other pests can be vehicles for spreading pathogens to people. Moreover, food, medication, IV fluid, medical supplies, equipment may spread infections to multiple residents. Strict adherence to Routine Practices and facility pest control policies are effective in preventing pathogen spread via these channels. The Hazard Analysis Critical Control Point Protocol published by the Ministry of Health in 1998 offers further guidance to prevent foodborne infections.

Precautionary Measures

Routine Practices (RP): are applied to all residents with suspected or confirmed infections, based on the HCWs' interactions with the resident and the extent of anticipated blood, body fluid, or pathogen exposure. Routine Practices include:

Hand Hygiene

- Avoid unnecessary touching of surfaces in close proximity to the resident when providing care.
- Sanitize hands with an alcohol-based hand rub **when** hands are not visibly soiled, or after removing visible material with plain soap and water. Less preferably, wash hands with antimicrobial soap and water.
    - Before having direct contact with a resident with suspected or confirmed infections.
    - After contact with blood, body fluids or excretions, mucous membranes, non-intact skin, or wound dressings.
    - After contact with a resident's intact skin (e.g. when taking a pulse or blood pressure or lifting a resident).
    - When hands will be moving from a contaminated body site to a clean body site during resident care.
    - After contact with objects in the immediate vicinity of a resident.
    - After removing gloves and other PPE.
- Wash hands with a plain or antimicrobial soap and water **when** hands are visibly dirty, contaminated with proteinaceous material, or visibly soiled with blood or body fluids, AND when contact with bacterial spores is likely to have occurred.

Use of PPE

- Wear PPE that fit.
- Remove and discard PPE before leaving the resident's room or cubicle using proper technique to avoid contamination.
- Do not reuse disposable PPE as they cannot be adequately cleaned and disinfected.
- Wear **disposable medical examination gloves** for providing direct care to protect the hands from contamination when contact with blood or other potentially infectious materials, mucous membranes, non-intact skin, or potentially contaminated intact skin (e.g. of a resident incontinent of stool or urine) is anticipated. Do NOT wear the same pair of gloves for more than one resident. Change gloves during resident care if the hands will move from a contaminated body site to a clean body site.
- Wear **reusable utility gloves** for cleaning the environment or medical equipment.
- Wear a **gown** for direct resident contact if the resident has uncontained secretions or excretions to protect skin and prevent soiling or contamination of clothing.
- Wear **mouth, nose, eye protection** to protect the mucous membranes of the eyes, nose and mouth during resident care activities that are likely to generate splashes or sprays of blood, body fluids, secretions and excretions.
- Wear a **face shield** that fully covers the front and sides of the face, or a **mask with attached shield**, or a **mask and goggles** during aerosol-generating procedures (e.g. bronchoscopy, suctioning of the respiratory tract not using in-line suction catheters, endotracheal intubation) in residents not suspected of being infected with an agent requiring respiratory protection.

Respiratory Hygiene / Cough Etiquette

- Applied broadly to all persons (HCWs, residents and visitors) entering the facility with signs of illness including cough, congestion, runny nose, or increased respiratory secretions.
- Aims to control the source of undiagnosed transmissible respiratory infections.

- Cover the mouth and nose with a tissue when coughing and dispose of used tissues promptly.
- Perform hand hygiene after contact with respiratory secretions.
- Post signs at entrances, elevators, cafeterias, etc. with instructions to anyone with respiratory symptoms to cover their mouths / noses when coughing or sneezing, use and dispose of tissues, and perform hand hygiene after hands have been in contact with respiratory secretions.
- Provide tissues and no-touch receptacles (foot-pedal operated lid or open, plastic-lined waste basket) for disposal of tissues.
- Provide resources and instructions for performing hand hygiene in or near common areas; provide conveniently-located dispensers of alcohol-based hand rubs and, where sinks are available, supplies for hand washing.
- When tolerated and appropriate, offer masks to coughing residents and other symptomatic persons upon entry into the facility, and encourage them to maintain spatial separation, ideally at least one metre, from others in common areas.
- Educate staff, residents and visitors to contain respiratory secretions, especially during seasonal outbreaks of viral respiratory tract infections.

Resident Placement

- Place residents who might spread infection to others (e.g. uncontained secretions, excretions or wound drainage) in a single room when available.
- Determine resident placement by assessing the route of spread of the known or suspected pathogen, the infected resident's risk for spreading the pathogen, other residents' risk of acquiring infection in the area or room, availability of single rooms, and if residents with the same infection could be cohorted.

Resident Care Equipment and Instrument / Devices (see sub-section on Cleaning and Disinfection)

Environmental Cleaning and Disinfection (see sub-section on Cleaning and Disinfection)

Textile and Laundry (see sub-section on Linen Handling)

Transmission-based Precautions: used in addition to RP when the spread of the pathogen is not completely interrupted by using RP alone, or when infection with epidemiologically-important pathogens are suspected or confirmed. Based on how the pathogens spread, these additional precautions are also known as transmission-based precautions, and they include Contact Precautions, Droplet Precautions, and Airborne Precautions. These precautions must be applied based on the clinical presentation and likely pathogens while waiting for laboratory confirmation. For additional information on the clinical conditions warranting additional precautions before the pathogens are identified, refer to the "Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, June 2007" by Siegel et al. Efforts must be made to counteract possible adverse effects on the residents, e.g. anxiety, depression and other mood disturbances, perceptions of stigma, reduced contact with staff and fellow residents and visitors.

Contact precautions (CP): intended to prevent spread of pathogens by direct or indirect contact with an infected person and his/her environment. For example, where excessive wound drainage, fecal incontinence, or other bodily discharges could increase the risk of extensive environmental contamination and spread of infection. Discontinue CP after signs and symptoms of the infection have resolved, or according to pathogen-specific recommendations. NOTE: extend the duration of CP for immunosuppressed residents with viral infections due to prolonged shedding of the viral pathogen that may be transmitted to others.

Resident Placement

- For each case, balance infection risks to roommates, the infected person's risk factors that increase the likelihood of spread, and the potential adverse psychological impact on the infected or colonized resident.

Use of PPE

- Don **gloves** upon entry into the room or cubicle when the HCW anticipates touching the resident's intact skin or surfaces and articles in the resident's vicinity.

- Don **gown** upon entry into the room or cubicle when anticipating that clothing will have direct contact with the resident or potentially contaminated environmental surfaces or equipment in the resident's vicinity.
- **Remove PPE** and perform hand hygiene before leaving the resident-care environment and take care to avoid clothing and skin contact with potentially contaminated environmental surfaces.

Resident Transport

- Limit residents transport and movement outside the room to medically-necessary purposes.
- When transport or movement is necessary, contain and cover any infected or colonized areas.
- Remove and dispose of contaminated PPE and perform hand hygiene prior to transporting residents.
- Don clean PPE to handle the resident at the transport destination.

Resident Care Equipment and Instruments / Devices

- Use disposable non-critical resident care equipment (e.g. blood pressure cuffs) or dedicate such equipment to the resident; clean and disinfect common use equipment for multiple residents before use on another resident.

Environmental Cleaning and Disinfection

- Prioritize rooms of residents on CP for frequent cleaning and disinfection (e.g. at least daily), focusing on frequently-touched surfaces (e.g. bed rails, over the bed table, bedside commode, lavatory surfaces in resident bathrooms, doorknob) and equipment in the resident's immediate vicinity.

Droplet precautions (DP): intended to prevent spread of pathogens by close respiratory or mucous membrane contact with respiratory secretions generated during coughing, sneezing or talking. Discontinue DP after signs and symptoms have resolved or according to pathogen-specific recommendations. NOTE: extend duration of DP for immunosuppressed residents with viral infections due to prolonged shedding of the viral pathogen that may be spread to other people.

Resident Placement

- Assess each case by considering infection risks to roommates and available alternatives.
- Single room preferred; cohort if single room not available, keep spatial separation of more than one metre and draw the curtain between resident beds.

Use of PPE

- Don a surgical **mask** upon entry into the resident room or cubicle when anticipating close contact with infectious residents.
- Wearing **goggle or face shield** for close contact with residents who require DP may be helpful.

Resident Transport

- Limit transport and movement of residents outside the room to medically-necessary purposes.
- When transport or movement is necessary, instruct resident to wear a surgical mask and follow Respiratory Hygiene / Cough Etiquette.
- No mask is required for persons transporting residents on DP.

Airborne precautions (AP): designed to prevent spread of pathogens that remain infectious over long distances when suspended in the air. Discontinue AP according to pathogen-specific recommendations.

Resident Placement

- Preferred placement in airborne infection isolation room (AIIR) with closed door:
  - 6 air changes per hour (existing facilities) or 9 air changes per hour (newly constructed facility), verified at least every 6 months.

- Negative room air pressure relative to the corridor, verified at least every 6 months.
- Direct air exhaust to the outside; if air recirculation is unavoidable, the air should be passed through a HEPA filters before being exhausted.

- When an AIIR is not available, transfer the resident to a facility that has an available AIIR, or mask the resident and place in private room with door closed.
- When the need for AIIR in the facility exceeds what is available (as in outbreaks):
  - Assess the safety of alternative room that does not meet engineering requirements for an AIIR.
  - Cohort residents presumed to have the same infection in areas of the facility away from other residents, especially those who are at increased risk for infection.

Personnel Restriction

- Whenever possible, non-immune HCWs should not care for residents with vaccine-preventable airborne diseases (e.g. measles, chickenpox, and smallpox).

Use of PPE

- Wear a **fit-tested N95** or higher level respirator on entry into the room of a resident with suspected or confirmed infections of:
  - Infectious pulmonary or laryngeal tuberculosis, or when infectious tuberculosis skin lesions are present and procedures that would aerosolize pathogens (e.g. irrigation, incision and drainage, whirlpool treatments) are performed.
  - Smallpox – vaccinated and unvaccinated HCWs should use respiratory protection due to the risk of a genetically engineered virus not covered by the vaccine, or of exposure to a very large viral load.
- For HCWs presumed to be immune to measles or varicella-zoster, it may be prudent to wear a respirator when caring for residents with known or suspected measles, chickenpox or disseminated zoster, as definite immunity is difficult to establish.
- For susceptible HCWs caring for residents with known or suspected measles, chickenpox or disseminated herpes zoster, it may be prudent to wear an N95 or higher level respirator than a surgical mask.

Resident Transport

- Limit transport and movement of residents outside the room to medically-necessary purposes.
- When transport or movement outside an AIIR is necessary, instruct resident to wear a surgical mask and follow Respiratory Hygiene / Cough Etiquette.
- For residents with chickenpox or smallpox skin lesions, or draining skin lesions of *Mycobacterium tuberculosis*, cover the affected area to prevent aerosolization of the pathogen in the skin lesions.
- HCWs transporting the resident on AP do not need to wear a mask or respirator during transport when the resident is wearing a surgical mask and skin lesions are covered.

Exposure Management

- Immunize or administer the appropriate immunoglobulin to susceptible persons as soon as possible following unprotected contacts to a person infected with measles, chickenpox or smallpox (See Canadian Immunization Guide for details):
  - Administer measles vaccine within 72 hours of exposure, or immune globulin within 6 days of the exposure event for persons for whom vaccine is contraindicated, or those for whom more than 72 hours but less than 1 week have elapsed since exposure.
  - Administer varicella vaccine within 5 days after exposure, or varicella zoster immune globulin (VarIg) within 96 hours for pregnant women or immunosuppressed persons.
  - Administer smallpox vaccine within 4 days after exposure.

Hand Washing

Hand washing is considered to be the most important measure to prevent the spread of infection!

Hands can play a major role in the indirect transmission of pathogens from surfaces to susceptible hosts. Therefore, hand washing facilities should be adequately located in LTCHs and RHs. “Readily accessible“, although not explicitly defined, means that a HCW must not have to travel through several doorways, halls, stairways, or use doorknobs or handles, in order to access the hand washing area.

Easy access minimizes the amount of time that contaminants remain in contact with skin, reduces the risk of cross contamination, and fosters an attitude of compliance due to accessibility of proper facilities.

Hand washing can be done with either plain soaps or antimicrobial products. Hand washing with plain soaps suspends microorganisms and allows them to be mechanically removed by rinsing under running water. Liquid, bar leaflet or powdered soap is acceptable for hand washing. Hand washing with antimicrobial products kills or inhibits the growth of microorganisms. This process is referred to as antisepsis.

Hands should be cared for so they do not become chapped or irritated. Using lotions can prevent this from occurring. It is important to note that petroleum-based lotions may weaken the integrity of latex gloves.

The Facts on Skin

- The skin of residents and HCWs can function as a reservoir for infectious agents and a vehicle for transfer of infectious agents to susceptible persons.
- The microbial flora of the skin consists of **resident** and **transient** microorganisms.
- **Resident microorganisms** persist and multiply on the skin, and are called the natural skin flora. They are very hard to remove with soap and water and often do not cause disease.
- **Transient microorganisms** are contaminants that usually survive for a limited period of time on the skin, and may be pathogens or disease causing organisms. Hand washing with soap and water is effective in removing many transient microorganisms.[6]

Hand Care

Adapted from the WHO Guidelines on Hand Hygiene in Health Care
October 2005

Intact skin is the first line of defense, therefore careful attention to skin care is an essential part of the hand hygiene program. During dry seasons and in individuals with damage to the skin, there have been documented increases in staphylococci and Gram-negative bacilli colonization. If integrity of skin is an issue, the individual should be referred to a physician for assessment.

There are two major types of skin reactions associated with hand hygiene. The first, and most common, is irritant contact dermatitis. Symptoms include dryness, irritation, itching, cracking and bleeding and can vary from mild to debilitating.

The second skin reaction is allergic contact dermatitis and although rare, occurs with an allergy to some ingredient in a hand hygiene product. In its most serious form, allergic contact dermatitis can lead to respiratory distress and anaphylaxis.

Hand hygiene products can damage the skin by causing denaturation of proteins in the stratum corneum (outermost layer of our skin), changes in intercellular lipids, and decreased stratum corneum water-binding capacity. The main concern is the depletion of the lipid barrier of epidermal cells.

There are two primary strategies to minimize hand hygiene-related irritant contact dermatitis among HCWs: select less irritating hand hygiene products and use moisturizing skin care products following hand cleansing.

Hand lotion prevents drying and cracked skin as they often contain humectants, fats and oils that increase skin hydration and replace altered or depleted skin lipids. Pump-type containers are recommended to prevent contamination. If containers are reused, the containers and the pumps should be washed and dried before refilling. All hand lotions should be reviewed with the person(s) overseeing employee health and infection prevention and control. It is also important to note that petroleum-based lotions may weaken the integrity of latex gloves.

Alcohol Hand Sanitizers

Most alcohol-based hand antiseptics contain ethanol, isopropanol, n-propanol, or a combination of two of these products. Concentrations are often expressed as a percentage by volume. The antimicrobial activity of alcohols results from their ability to denature proteins.

Alcohols have strong killing activity against Gram-positive and Gram-negative vegetative bacteria (including MRSA and VRE), *M. tuberculosis* and a variety of fungi. Unfortunately, they have limited activity against some non-enveloped (non-lipophilic) viruses and virtually no activity against bacterial spores or protozoan oocysts.

Alcohols are not good cleansing agents and their use is not recommended when hands are dirty or visibly contaminated with organic materials. However, when relatively small amounts of organic material are present, ethanol and isopropanol may reduce viable bacterial counts on hands but do not disqualify the need for handwashing with soap and water.

The efficacy of alcohol-based hand hygiene products is affected by a number of factors, including the type of alcohol used, the concentration of alcohol, the contact time, the volume of alcohol used, and whether the hands are wet when the alcohol is applied.

The WHO recommends an alcohol-based formulation for the following reasons:

- To benefit from its evidence-based intrinsic advantages: fast acting and broad-spectrum activity, excellent killing characteristics against microorganisms, lack of potential emergency of resistance;
- To overcome the lack of accessibility to sinks or other facilities to perform hand cleansing actions that require the use of water;
- To improve compliance with hand hygiene by reducing the time required to perform it and the convenience of the method;
- To reduce costs

Quaternary Ammonium Hand Sanitizers

In general, quaternary ammonium (quat) compounds are not well tolerated.

The antimicrobial activity of these compounds appears to be attributable to adsorption to the cell membrane, with subsequent leakage of low molecular weight components inside the cell. Quat compounds primarily inhibit bacterial and fungal growth, although they can be microbicidal at high concentrations. They are more active against Gram-positive bacteria than Gram-negative. Unfortunately, because of their weak activity against Gram-negative bacteria, quats can be prone to contamination by these organisms. Quats have relatively weak activity against mycobacteria and fungi.

Quaternary ammonium hand sanitizers have seldom been used for hand antisepsis in the past 20 years but newer products are being introduced. Further studies of such products are needed to determine if newer formulations are effective in healthcare settings.

Procedure for Hand washing

1. Check for adequate paper towels before washing your hands.
2. Wet your hands with water.
3. Apply enough soap to create a good lather.
4. Using friction, rub hands, cleaning under nails and between fingers thoroughly.
5. Wash up to your wrists as well. Do this for 10-15 seconds.
6. Rinse hands well, without touching the inside of the sink or the faucet. Leave water running.
7. Dry your hands well. When finished, turn off faucet with a clean paper towel.
8. Discard the paper towel in an appropriate trash container.

When to Wash Your Hands (at a minimum):

- When reporting to work, and before going home.
- Before and after eating and drinking.
- After sneezing, coughing, or blowing your nose.
- After touching your hair, face, nose etc.
- Before and after smoking.
- Before and after each resident contact.
- After touching a resident, or handling his or her belongings.
- Whenever hands are visibly soiled.
- After contact with any blood or body fluids.
- After removing gloves.
- After handling any contaminated items (i.e. linens, soiled diapers, garbage, etc.).

Procedure for Using Alcohol Hand Sanitizer

(60% to 90% isopropanol or ethanol or a combination)

1. The hands should be free of dirt and organic materials.
2. Apply enough alcohol-based hand sanitizer (1.5 mL) to cover the entire surface of the hands and fingers, or a drop about the size of a nickel.
3. Rub the solution until dry.

- The alcohol hand sanitizer may be used routinely for hand hygiene, unless hands are visibly soiled; then soap and water hand washing is required.
- Always wash hands with soap and water after blood or body fluid exposure.
- It is not recommended to routinely wash hands with water after using alcohol hand sanitizer.

When to Use Alcohol Hand Sanitizer

- Only when hands are not visibly soiled.
- After contact with residents' intact skin (as in taking a pulse, blood pressure or repositioning a resident).
- After contact with inanimate objects (including medical equipment).
- Before donning gloves.
- Before entering a resident's room.
- Before exiting a resident's room.
- Ask residents to use prior to eating or participating in group activities.
- Residents may use alcohol hand sanitizer when hands are not visibly soiled.

Advantages of Alcohol Hand Sanitizer

- Active against all bacteria and most clinically important viruses and fungi.
- Rapidly kills microorganisms.
- Spreads quickly across the skin.
- Evaporates quickly.
- Leaves an emollient on hands which prevents drying and cracking.
- No sink rinse required.

Disadvantage of Alcohol Hand Sanitizer

- Very poor activity against bacterial spores, (i.e. *C. difficile*), protozoan cysts and oocysts, and certain non-enveloped (non-lipophilic) viruses (i.e. Norovirus, hepatitis A virus, rhinoviruses, polioviruses, coxsackieviruses).[7]

Example of Hand Washing Poster

Ontario Ministry of Health and Long-Term Care:
http://www.health.gov.on.ca/English/public/pub/pubhealth/pdf/handwash.pdf

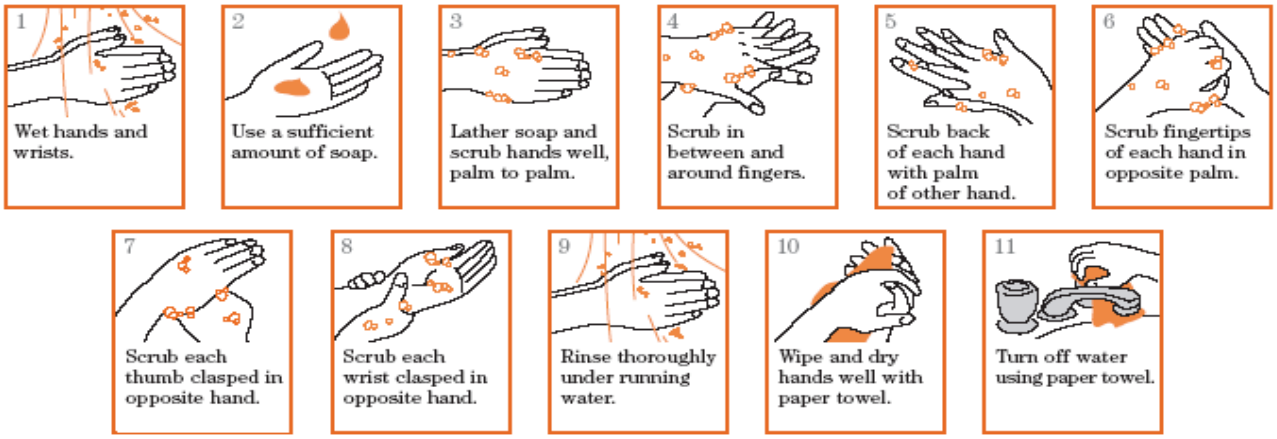
Handwashing

To wash hands properly, rub all parts of the hands and wrists with soap and water or an alcohol-based hand sanitizer. Wash hands for at least 15 seconds or more. Pay special attention to the areas of the hand most frequently missed.

- Keep nails short.
- Avoid wearing rings.
- Avoid artificial nails or nail varnish.
- Remove watches and bracelets.
- Wash wrists and forearms if they are likely to have been contaminated.
- Make sure that sleeves are rolled up and do not get wet during washing.

If you have any questions regarding cuts, sores, allergies or pre-existing skin conditions, call Telehealth Ontario at 1-866-797-0000, TTY 1-866-797-0007.

Handwashing with soap and water



Cleaning with alcohol sanitizers

Ontario

Signage

These signs are provided for reference. Respect for resident's privacy should be taken into consideration whenever possible.

Droplet Precautions

Visitors: Please report to nursing station before entering room.

Resident Placement

Maintain a distance of at least 1 metre between residents

Goggle or Face Shield

Where splashes or sprays of body fluids may occur

Mask–surgical/procedure

Within 1 metre of resident

Hand Washing

Before direct contact with resident
After touching contaminated articles
After direct contact with resident

Resident Transport

Transport for essential purposes only
Resident must wear mask during transport
Notify receiving department

Contact Precautions

Visitors: Please report to nursing station before entering room.

Resident Placement

Maintain at least 1 m between residents
Door may remain open

Resident Care Equipment

Dedicate to this resident or disinfect after use

Gown

If contamination or soiling is likely

Goggle or Face Shield

Where splashes or sprays of body fluids may occur

Gloves

On entry into resident's room or bed-space

Hand Washing

After removing gloves
After touching contaminated articles

Resident Transport

Transport for essential purposes only
Notify receiving department

Droplet / Contact Precautions

Visitors: Please report to nursing station before entering room.

Resident Placement

Maintain at least 1 m between residents
Door may remain open

Goggle or Face Shield

Where splashes or sprays of body fluids may occur

Resident Care Equipment

Dedicate to this resident or disinfect after use

Mask–surgical/procedure

Within 1 m of coughing resident

Gloves

On entry into resident's room or bed-space

Gown

If contamination or soiling is likely

Hand Washing

After removing gloves
After touching contaminated articles

Resident Transport

Transport for essential purposes only
Resident must wear mask during transport
Notify receiving department

Airborne Precautions

Visitors: Please report to nursing station before entering room.

Resident Placement

Single room – Keep door closed

Goggle or Face Shield

Where splashes or sprays of body fluids may occur

Mask

Special high-efficiency (i.e. N95 respirator) mask upon entering room

Hand Washing

Before direct contact with resident
After touching contaminated articles
After direct contact with resident

Resident Transport

Transport for essential purposes only
Resident must wear mask during transport
Notify receiving department

Types of Personal Protective Equipment

Gloves: should be worn when it is anticipated that employees will have contact with blood or other potentially infectious materials. Gloves should be:

- Single use disposable (cannot be washed).
- Removed if torn, punctured, or when their ability to serve as a barrier is compromised.
- Vinyl or nitrile to prevent latex allergies in sensitive individuals.[8]

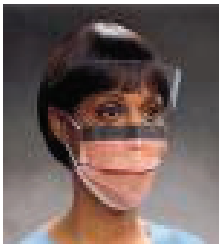
Types of gloves	Suggested use for:	Not recommended for:
Latex • Preferred for tasks with moderate to high risk of exposure to potentially infectious materials and when a non-sterile hand covering is indicated. • Change every 15 to 30 minutes depending on the task or procedure, the amount of blood and fluid exposure and the contact with needles and other sharp instruments.	• Direct resident care involving exposure to potentially infectious materials and for contact with blood and body fluid specimens or items contaminated with blood or body fluids.	• Persons allergic or sensitive to latex and for prolonged contact with high-level disinfectants, such as glutaraldehyde.
Nitrile • Preferred for persons sensitive or allergic to latex AND may be at moderate to high risk of exposure to potentially infectious materials. • Typically has better chemical resistance than latex, especially to hydrocarbon-based products (e.g., products containing mineral oil, petrolatum or lanolin).	• Persons allergic or sensitive to latex and who perform tasks involving prolonged exposure to blood, body fluids, chemotherapeutic agents, cleaning solutions and other chemicals.	• Persons allergic or sensitive to nitrile compounds.
Vinyl • Appropriate for short-term tasks that involve minimal stress on the glove and low risk of exposure to potentially infectious materials.	• Changing bed linens. • Briefly suctioning endotracheal secretions. • Emptying emesis basins. • Discontinuing an IV line. • Handling and preparing food.	• Moderate to high risk of exposure to blood or body fluids. • Preparing, handling or administering chemotherapeutic agents. • Handling chemicals or other caustic agents. • Performing environmental services or housekeeping duties. • Persons sensitive or allergic to vinyl compounds.

Hand hygiene: is recognized as the most important way to prevent the transmission of infection. Hands are to be washed after removing gloves and before taking off other PPE, especially masks and goggles.

Antimicrobial soap: Soap (i.e. detergent) containing an antiseptic agent.

Alcohol-based Hand Sanitizer: 60% to 90% alcohol. They either contain isopropanol, or ethanol, or a combination of the two products.

They are also known as a waterless antiseptic agent. After applying such an agent, the hands are rubbed together until the agent has dried. Alcohols have very poor activity against bacterial spores, (e.g. *C. difficile*), protozoan cysts and oocysts, and certain non-enveloped (non-lipophilic) viruses (i.e. Norovirus, hepatitis A virus, rhinoviruses, polioviruses, coxsackieviruses).[7]



Eye Protection: such as safety glasses, goggles or face shields must provide a barrier to splashes from the side. They are to be worn whenever splashes sprays, splatters, or droplets of blood or other potentially infectious materials may be generated, and where eye, nose, or mouth contamination can occur. Eye protection equipment may be single use disposable and/or washable (but must be cleaned before it can be reused). Prescription glasses are not acceptable as eye protection.

Masks: securely cover the nose and mouth. Masks should be resistant to fluids, substantial enough to prevent droplet penetration, and be able to perform for a minimum of 45 minutes. As a guide, the mask should be changed after eight hours, or sooner if it becomes damaged, soiled or breathing becomes difficult. Leave the contaminated area and dispose of the mask. Masks are not necessarily designed for filtration efficiency, or to seal tightly to the face.[9, 10]

Surgical/procedure masks:

- Prevent large particles (droplets) from being expelled into the environment by the wearer,
- Protect the wearer from splashes of blood or other potentially infectious substances.

High efficiency respirators:

- Protect the wearer from small particles (droplet nuclei) that remain suspended in the air and thus travel long distances.
- HCWs should be educated on the proper way to wear this type of mask and be properly fit tested.

Protective clothing: such as lab coats, aprons, fluid resistant disposable gowns, or similar garments that can protect uniforms as needed.

Examples of Task/Procedure and Personal Protective Equipment

Task	Hand washing	Gloves	Gown/Apron	Mask	Eye Protection
Routine specimen collection	Yes	Yes	Necessary only if splashes/soiling is anticipated		
Soiled linen					
Foley catheter care					
Injection of medication					
Blood/body fluids spills					
Assisting with fallen resident					
Feeding resident					
Dressing changes					
Post Mortem Care					
Cleaning broken glass			Necessary only if splashes/soiling is anticipated. Use a dust pan or tongs.		
Infectious waste handling			Recommended		
Oral care for residents			Strongly recommended		
Cleaning a clogged plumbing drain					
Cleaning equipment					
Volunteer activities		No	Dependent on type of task or potential exposure		

Personal Protective Equipment

Introduction

The use of specialized clothing or equipment referred to as "Personal Protective Equipment (PPE)" is worn by an employee for protection against infectious materials.

Gloves

- Gloves must be used to reduce the risk of health care workers (HCW) exposure to blood, moist body substances, mucous membranes or non-intact skin.
- Gloves are not a substitute for hand hygiene.
- Gloves must be changed between residents, and before and after care activities with the same resident.
- Gloves must be removed and discarded into a waste receptacle after the activity for which they were used.
- Hands may become contaminated through glove defects or during glove removal.
- Hands must be washed upon glove removal.
- It is important to assess and select the best glove for the given task and ensure a snug fit around the wrist.
- A good quality vinyl glove is appropriate for routine resident care activities.
- **A latex or synthetic (i.e. nitrile/neoprene) glove is appropriate when performing tasks that require manual dexterity or involve prolonged exposure to blood, body fluids or chemicals.**
- **A sterile glove is required when performing sterile procedures.**

Gowns

- Long-sleeved, fluid resistant gowns protect the forearms and clothing of the HCW from splashing and soiling with potentially infectious body substances. Gowns are recommended during routine care activities in which this is likely to occur and must be removed immediately after the task. Gowns are not reusable.

Masks

- Masks should be worn where appropriate to protect the mucous membranes of the nose and mouth during procedures and resident care activities likely to generate splashes or sprays of blood, body fluids, secretions or excretions.
- Masks should securely cover the nose and mouth.
- Masks should be changed if they become moist or wet, interfere with breathing, are damaged, or visibly soiled. Do not reuse masks.
- Mask should be selected for appropriateness based on required resident care activities.
- Fluid resistant surgical masks are worn to protect the HCW from acquisition of infections transmitted by large respiratory droplets (i.e. febrile respiratory illness, influenza, strep pneumoniae).
- N95 respirator masks are used to protect the HCW from acquiring infections transmitted by small airborne particles (i.e. chicken pox, measles, and tuberculosis). It is essential to ensure the mask has been "fit-tested".
- Masks should be placed on a coughing resident when outside of their room to protect other residents and staff.

Eye protection:

- Safety goggles, face shields, safety glasses (in addition to masks) or visors attached to masks should be worn by HCWs to protect the mucous membranes of the eyes, during resident care activities likely to generate splashes or sprays of blood, body fluids, secretions or excretions that are a potential source of infection, or within 2 metres of a coughing resident.
- Prescription eye glasses alone should not be considered adequate for eye protection.
- Eye protection may be disposable or if reusable should be cleaned prior to reuse.
- Personally owned eyewear may be cleaned after each use

Personal Protective Equipment

Follow these steps to put on PPE

1. Hand Hygiene

- ☑ Wash hands with soap and water or alcohol based hand rub

2. Gown

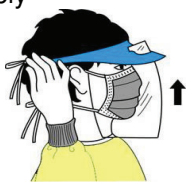
- ☑ Select appropriate type and size
- ☑ Opening is in the back

3. Mask or N95 respirator

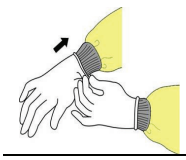
- ☑ Select a mask or fit tested N95 respirator
- ☑ Place over nose, mouth and chin
- ☑ Fit flexible nose piece over nose bridge
- ☑ Secure on head with elastic or ties
- ☑ Adjust to fit
- ☑ N95: Perform a fit check –
  - ☑ Inhale-respirator should collapse
  - ☑ Exhale-check for leakage around face

4. Goggles/Face shield

- ☑ Position goggles over eyes
- ☑ Position face shield over face and secure on brow with headband
- ☑ Adjust to fit comfortably



5. Gloves



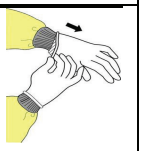
- ☑ Select correct type and size
- ☑ Insert hands into gloves
- ☑ Extend gloves over gown cuffs

Reference:

Ontario Ministry of Health and Long-Term Care. Provincial Infectious Disease Advisory Committee. Routine Practices and Additional Precautions In All Health Care Settings. August,2009

Follow these steps to take off PPE

1. Gloves



- ☑ Grasp outside edge near wrist
- ☑ Peel away from hand, turning glove inside-out
- ☑ Hold in opposite gloved hand
- ☑ Slide ungloved finger under the wrist of the remaining glove
- ☑ Peel off from inside, creating a bag for both gloves
- ☑ Discard gloves

2. Gown

- ☑ Unfasten ties
- ☑ Peel gown away from neck and shoulder
- ☑ Turn contaminated outside toward the inside
- ☑ Fold or roll into a bundle
- ☑ Discard or launder

3. Hand Hygiene

- ☑ Prior to touching your face; wash hands with soap and water or alcohol based hand rub

4. Goggles/Face shield

- ☑ Grasp ear or head pieces with ungloved hands
- ☑ Lift away from face
- ☑ Place in designated receptacle for reprocessing or disposal
- ☑ The front of the goggles are considered contaminated

5. Mask or N95 Respirator

- ☑ Untie the bottom then top tie
- ☑ Remove from face using strings
- ☑ Discard

6. Hand Hygiene

- ☑ Wash hands with soap and water or alcohol based hand rub

Linen Handling

Clean Linen

Clean linen should be handled carefully. Hold it away from your body or uniform. If clean linen should come in contact with anything that is contaminated (i.e. the floor, another resident), place it directly into a soiled linen hamper so that it can be rewashed.

Clean linen cart covers should be in place and used at all times to protect clean linens from contamination. Carts should not be placed near soiled linen hampers. A good rule of thumb is to have the carts at least one metre apart, which is the width of a doorway or hallway. Only the exact amount of clean linen required should be brought to a resident's room or ward. Do not store extra linen in the resident's room.

Soiled Linen

Soiled linen can be a source of infection and should be handled carefully.

- Gloves should be worn when handling grossly contaminated laundry.
- Wash hands before beginning every new task. Wash when you remove gloves and before going on to the next task.
- When collecting soiled laundry from the units, remove gloves whenever touching high use objects (i.e. doorknobs, handles, key codes).
- Soiled linen should be held away from the body and uniform.
- Deposit soiled linen immediately into the soiled linen hamper and replace cover.
- Minimize sorting or unnecessary handling of soiled linen.
- Never shake out dirty linen; this may cause germs to become airborne.

When handling soiled linen, laundry department workers should wear PPE, including gloves, and gown or apron to protect the body and uniform. Remove PPE when the task is completed and wash or discard as per facility policy.

Environmental Cleaning and Disinfection

Health care settings are complex environments that contain a large diversity of microbial flora, many of which constitute a risk to the residents, staff and visitors. Transmission of microorganisms within a health care setting is intricate and very different from transmission outside health care settings. High-touch environmental surfaces of the health care setting hold a greater risk than do public areas of non-health care organizations, due to the nature of activities performed.

In the long-term 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 microorganisms from one person/object to another, thereby reducing the risk of infection.

Each long-term care facility should have policies and procedures in place to ensure that:

- Cleaning and disinfecting is a continuous event in the facility.
- Cleaning and disinfecting standards, frequency and accountability for cleaning and disinfecting are clearly defined.
- Cleaning and disinfecting schedules ensure that no area or item is missed from routine cleaning.
- Long-term care homes' requirements are met in relation to:
    - Safe disposal of clinical waste.
    - Safe handing of linen.
    - Food hygiene.
    - Pest control.

All long-term care facilities must devote adequate resources to environmental services that include:

- One individual with assigned overall responsibility for the care of the physical facility.
- Adequate human resources to thorough and timely cleaning and disinfection.
- Priority for cleaning and disinfecting given to resident care areas rather than to administrative and public areas.
- Procedures for environmental cleaning during an outbreak and provision for additional environmental cleaning capacity during outbreaks.
- Education and continuing education of cleaning staff.
- Monitoring of environmental cleanliness and results reported back appropriately to staff.
- Supervision of cleaning staff by those who are trained and knowledgeable in cleaning standards and practices.
- Ongoing review of procedures.

Finishes and Surfaces in Areas Where Care is Delivered

Long-term care settings should have policies that include criteria when choosing furnishings and equipment for resident care areas. The ease of cleaning is an important consideration in the choice of materials for floors, ceilings, walls, equipment and furnishings. Materials and finishes must be able to withstand detergents, cleaners and disinfectants. Important characteristics of surfaces include:

- Ease of maintenance and repair
- Cleanability.
- Inability to support microbial growth.
- Surface porosity.
- Absence of seams.

Care and Storage of Cleaning & Disinfecting Supplies

All chemical cleaning agents and disinfectants should be appropriately labeled and stored in a manner that eliminates risk of contamination, inhalation, skin contact or personal injury. An automated dispensing system should be used to ensure integrity of dilution ratios and to eliminate the need for decanting. Calibration of the dispensing system should be regularly monitored. If a refillable bottle is filled with a disinfectant solution, it should never be topped up with fresh disinfectant. Always use a clean, dry appropriately-sized bottle, label the product and date it. The product should be discarded when past the expiry date for stability.

Cleaning equipment requires attention to avoid cross-transmission of microorganisms and proliferation in dirty environments. Tools and equipment used for cleaning and disinfecting must be cleaned and dried themselves between uses. Mop heads should be laundered daily. Cleaning carts should be equipped with a locked compartment for storage of hazardous substances and each cart should be locked at all times when not attended.

Equipment used to clean toilets (e.g. brushes) should not be carried from room-to-room. If feasible, the toilet brush should remain in the room or be one-time use disposable. In multi-bed rooms, a system should be developed for replacement of toilet brushes on a regular basis or as required. When choosing a tool for cleaning toilets, consideration should be given to equipment that will minimize splashing.

Sufficient housekeeping rooms/closets should be provided throughout the facility to maintain a clean and sanitary environment, with at least one room/closet per resident floor. In general, a housekeeping room/closet should be or have:

- A dedicated room, not used for other purposes.
- Maintained in accordance with good hygiene practices.
- Eye protection available.
- Appropriate water supply and a sink/floor drain.
- Well ventilated.
- Suitable lighting.
- Easily accessible.
- Locks fitted to all doors.
- Allow for proper ergonomic movement within the room/closet.
- Never contain personal clothing or grooming supplies, food or beverages.
- Chemical storage that ensures chemicals are not damaged and may be safely accessed.
- Free from clutter to facilitate cleaning.

Routine Cleaning

Cleaning: The physical removal of foreign materials such as dust, soil or organic material like blood, secretions, excretions and microorganisms. Cleaning physically removes, rather than kills, microorganisms. It also reduces the number of organisms and removes foreign materials (i.e. organic residue and inorganic salts) that interfere with sterilization or disinfection. It is accomplished with water, detergents and mechanical action. Thorough and meticulous cleaning is required before any equipment/device may be decontaminated, disinfected and/or sterilized.

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

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

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 care setting.

Hospital Clean: The measures of cleanliness routinely maintained in resident care areas of the health care setting. Hospital clean is 'Hotel Clean' with the addition of disinfection, increased frequency of cleaning, auditing and other infection control measures in resident care areas.

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

Resident Environment: In long-term care, this includes a resident's individual environment such as bed space and bathroom and personal mobility devices such as wheelchair and walker.

Health care facilities may be categorized into two components for the purposes of environmental cleaning: the hotel component and the hospital component. The hotel component is the area of the facility that is not involved in resident care; this includes public areas such as lobbies, common areas, offices, corridors, and elevators and stairwells. The hospital component is the area of the facility that is involved in resident care; this includes resident units (including nursing stations); procedure rooms; bathrooms; and diagnostic and treatment areas.

Environmental cleaning of these two component areas must be resourced differently in terms of cleaning priority, intensity, frequency and manpower. ***From a resident safety and staff safety perspective, hospital clean is the most important cleaning and resource priorities should be centred here.***

Components of Hotel Clean

- Floors and baseboards are free of stains, visible dust, spills and streaks
- Walls, ceilings and doors are free of visible dust, gross soil, streaks, spider webs and handprints
- All horizontal surfaces are free of visible dust or streaks (includes furniture, window ledges, overhead lights, phones, picture frames, carpets etc.)
- Bathroom fixtures including toilets, sinks, tubs and showers are free of streaks, soil, stains and soap scum
- Mirrors and windows are free of dust and streaks
- Dispensers are free of dust, soiling and residue and replaced/replenished when empty
- Appliances are free of dust, soiling and stains
- Waste is disposed of appropriately
- Items that are broken, torn, cracked or malfunctioning are replaced

Components of Hospital Clean

Hotel Clean

+

- High touch surfaces in resident care areas are cleaned and disinfected
- Non-critical medical equipment is cleaned and disinfected between residents

+

Cleaning practices are periodically monitored and audited with feedback and education

*Frequency of hospital clean should be determined by a risk assessment

Frequency of Routine Cleaning

The frequency of cleaning and disinfecting in a particular area or department depends on:

- Whether surfaces are high-touch or low-touch.
- The type of activity taking place in the area and the risk of infection associated with it (e.g. care area vs. meeting room).
- The vulnerability of residents housed in the area.
- The probability of contamination based on the amount of body fluid contamination surfaces in the area might have or be expected to have.

Using these criteria, each area or department in a health care setting may be evaluated and assigned a risk score for cleaning purposes. For more information on the risk stratification matrix to determine frequency of cleaning, see the Best Practices for Environmental Cleaning for Infection Prevention and Control in All Health Care Settings, 2009.

Disinfection

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

Disinfectant: An antimicrobial agent capable of destroying microorganisms on inanimate surfaces. A disinfectant without specified target organisms on the container label is regarded only as a bactericide.

High-level Disinfectant: A disinfectant that destroys vegetative bacteria, mycobacteria, fungi, viruses, but not necessarily bacterial spores.

Low-level Disinfectant: A disinfectant that kills most vegetative bacteria, some fungi and enveloped (lipid) viruses. Low level disinfectants do not kill mycobacteria or bacterial spores.

Chemosterilant: An antimicrobial agent capable of destroying all forms of microorganisms (including bacterial spores) on inanimate surfaces.

Sporicide: An antimicrobial agent capable of destroying bacterial spores.

Virucide: An antimicrobial agent capable of destroying viruses.

Bactericide: An antimicrobial agent capable of destroying bacteria, but not necessarily bacterial spores or mycobacteria.

Germicide: Synonymous with disinfectant.

Fungicide: An antimicrobial agent capable of destroying fungi, including their spores.

Mycobactericide: An antimicrobial agent capable of destroying mycobacteria.

Tuberculocide: Synonymous with mycobactericide.

Disinfectants rapidly kill or inactivate most infectious agents. When choosing a disinfectant, the following factors should be considered:

- disinfectant must have a drug identification number (DIN) from Health Canada
- nature of the item to be disinfected
- innate resistance of expected microorganisms to the inactivating effects of the disinfectant
- amount of organic soil present

- type and concentration of disinfectant used
- duration of contact time required for efficacy at the usual room temperature of the long-term care setting
- occupational health considerations
- environmental protection

Low level disinfectants for environmental disinfection use in all health care settings:

- Alcohols
- Chlorine
- Phenolics
- Quaternary Ammonium Compounds (QUATs)
- Iodophors
- Accelerated Hydrogen Peroxide (AHP)

Reprocessing of Medical Equipment and Devices

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.

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

Single patient use: Medical equipment/device that may be used on a single resident and may be reused on the same resident, but may not be used on other residents.

Single-use/disposable: Medical equipment/device designated by the manufacturer for single-use only. Single-use equipment/devices must not be reprocessed.

It is strongly recommended that catheters, drains, and any other medical equipment with small lumens be designated single-use and not be reprocessed and reused. Needles must be single-use.

The goals of safe reprocessing of medical equipment/devices include:

- Preventing transmission of microorganisms to staff and residents.
- Minimizing damage to medical equipment/devices from foreign material (e.g. blood, body fluids, saline and medications) or inappropriate handling.

Best practices in reprocessing medical equipment/devices must include the following:

- A corporate strategy for dealing with single-use medical equipment/devices.
- Adequate review when new equipment is being considered for purchase.
- Centralized area for reprocessing.
- Training of all staff who do reprocessing.
- Written policies and procedures for each type of medical equipment/device that is reprocessed.
- Validation of cleanliness, sterility and function of the reprocessed equipment/device.
- Continual monitoring of reprocessing procedures to ensure quality.

Factors Affecting the Efficacy of the Reprocessing Procedure

Many factors affect the efficacy of reprocessing, particularly when chemical reprocessing is used. These factors include:

- Cleanliness of the surface of the equipment/device.
  - Many chemical disinfectants are inactivated by organic material.
  - The greater the bioburden, the more difficult it is to disinfect or sterilize the equipment/device.
- Type and concentration of the product.
  - Products must be mixed according to manufacturer's recommendations.
  - Equipment should be dried after cleaning but before immersing in disinfectant to prevent dilution of the disinfectant.
  - Discard solutions on or before expiry dates.
  - Use chemical test strips to assess the efficacy of all disinfectants.
  - Some microorganisms are more resistant to germicidal chemicals.
- Duration and temperature of exposure to the product.
  - Do not exceed the manufacturer's recommendations for maximum exposure time as some chemicals may cause damage to the medical equipment/device.
  - All surfaces of the article must be in direct contact with the disinfectant.
- Physical and chemical properties of the equipment/device being reprocessed or the surrounding environment.
  - Water hardness can affect some disinfectants.
  - Excessive humidity may compromise sterile wrappings.
  - The pH of the solutions may be important as extremes of acidity or alkalinity can limit growth of microorganisms or alter the activity of disinfectants.
  - Materials such as rubber and plastic may require special treatment.
  - Hinges, cracks, crevices on the equipment/device may impede successful disinfection.

Transportation and Handling of Clean and Contaminated Medical Equipment/Devices

Clean medical equipment/devices should be transported throughout the long-term care facility in a manner that prevents contamination prior to use on a resident. If cleaning cannot be done immediately following use, the medical equipment/device should be submerged in tepid water and/or detergent to prevent organic matter from drying on it. Gross soil should be removed immediately at point of use if the cleaning process cannot be completed immediately after use. Soiled medical equipment/devices should be handled in a manner that reduces the risk of exposure and/or injury to staff and residents, or contamination of environmental surfaces. This can be achieved by:

- Using closed carts or covered containers with easily cleanable surfaces for handling and transporting clean and soiled medical equipment/devices.
- Transporting soiled equipment/devices by direct routes to areas where cleaning will be done.
- Cleaning containers or carts used to transport soiled items after each use.

Sterilization of Reusable Medical Equipment/Devices

Sterilization is the elimination of all disease-producing microorganisms, including spores. Prions are not susceptible to routine sterilization. The preferred method for heat-resistant equipment/devices is steam sterilization (pre-vacuum sterilizers are preferred). For items that cannot withstand heat sterilization, certain chemical products are available to achieve sterilization. Boiling, ultraviolet radiation, microwave ovens, and glass

bead sterilizers are not acceptable methods of sterilization. Chemiclaves, which use chemical-vapours to sterilize, are not recommended due to the environmental and occupational risks associated with them.

The sterilization process requires testing, monitoring and auditing including:

- Mechanical monitoring – time, temperature, pressure is recorded.
- Chemical monitoring – each pack must have external chemical indicators that change colour upon exposure to the appropriate sterilant.
- Biological monitoring – spore-laden strips or vials are used to ensure sterility is reached.
- Specific monitoring for specific sterilizers – various sterilizers will require additional quality assurance measures.

Sterility must be maintained until point of use. 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 (e.g. open, wet, dirty). Medical equipment/devices purchased as sterile must be used before the expiration date if one is given. Sterile packages that lose their integrity must be re-sterilized prior to use.

Reprocessed medical equipment/devices shall be stored in a clean, dry location in a manner that minimizes contamination or damage. Containers used for storage of clean equipment/devices should be moisture-resistant and cleanable (e.g. cardboard should not be used). Store equipment/devices in a clean, dry, dust-free area (closed shelves), not at floor level, and at least one meter away from debris, drains, moisture and vermin to prevent contamination.

Reference:
Best Practices for Environmental Cleaning for Infection Prevention and Control in All Health Care Settings, 2009.
http://www.health.gov.on.ca/english/providers/program/infectious/diseases/best_prac/bp_enviro_clean.pdf

Animals in Long-Term Care Homes and Retirement Homes

Domestic animals may be present in LTCHs and RHs as pets or as partners in pet therapy. Wild animals may occasionally enter the facility by accident. Persons in LTCHs and RHs may receive conflicting medical advice about keeping pets, as animals may pass germs or parasites to people (especially those with a weakened immune system). However, residents may have already developed immunities to their pets' germs, so keeping pets may not actually cause significant health risks. The important point is to encourage and educate residents and staff about hygiene (i.e. hand washing) and sanitary practices after handling pets. The same Routine Practices that help protect against communicable diseases from other humans also apply to pets.[15]

Diseases acquired from pets

Animal diseases can spread to people in LTCHs and RHs via bites, scratches, aerosols, parasites on their bodies, accidental ingestion, or contact with contaminated soil, food or water. While domesticated animals such as dogs and cats tend to have fewer risks for disease transmission because of their long histories of living with humans, they can still harbour pathogens such as VRE and MRSA. To reduce the risks of transmitting animal diseases to humans, consider the following: obtain the pet from a reputable domestic source; seek regular veterinary care including recommended vaccines and preventive medications; provide an animal diet of uncontaminated food and water; and provide flea and tick control for the animal. Wild (exotic) animals, even if born in captivity, can present greater health risks to humans because they have less predictable behaviors, there may be fewer effective vaccines, and they may have germs not usually encountered by persons in Ontario or Canada.

Examples of some common animal diseases that can be passed to humans [47]

Infectious disease	Cats	Dogs	Fish	Birds	Rabbits	Reptiles	Primates	Rodents
Virus								
Lymphocytic choriomenigitis								✔
Rabies	✔	✔						
Bacteria								
Campylobacteriosis	✔	✔				✔	✔	✔
Capnocytophaga canimorsus infection	✔	✔						
Cat scratch disease (*Bartonella henselae*)	✔							
Clostridium difficile	✔	✔						
Leptospirosis	✔	✔					✔	✔
Mycobacteriosis			✔	✔				
Pasteurellosis	✔	✔			✔			
Plague	✔			✔			✔	✔
Psittacosis				✔ *				
Q fever (*Coxiella burnetti*)	✔							
Rat bite fever (*Spirrillum minus, Streptobacillus monliformis*)								✔
Rocky Mountain Spotted Fever (from ticks)		✔						
Salmonellosis	✔	✔	✔	✔ **	✔	✔	✔	✔
Tularemia	✔				✔			✔
Yersiniosis					✔	✔	✔	✔
Parasites								
Ancylostomiasis (hookworm larval migrans)	✔	✔					✔	
Cryptococcosis				✔ †				
Cryptosporidiosis	✔	✔						
Fleas		✔						
Giardiasis	✔	✔					✔	
Mites		✔						
Tapeworm (*Dipylidium caninum*)	✔	✔						
Toxocariasis (round worm larval migrans)	✔	✔					✔	
Toxoplasmosis	✔	✔					✔	
Fungi								
Blastomycosis		✔						
Dermatophytosis		✔			✔		✔	✔

* Pet birds, including parrots and parakeets.
** Many birds, especially chickens, baby chicks, ducklings.
† Wild bird droppings, including those from pigeons.

Precautions around resident animals [47]

Some LTCHs and RHs are adopting more home-like environments for residents, including allowing residents to keep animals on site. Issues that must be considered before embarking on such a program include:

- Whether the animals will come into direct contact with residents and/or be allowed to roam freely in the facility.
- How the staff will provide care (including feeding) for the animals.
- How to manage residents' allergies, asthma, and phobias.
- Measures to restrict the animals from areas where food is prepared, handled, stored or served, except for service animals which are allowed to access areas where food is served.
- Precautionary measures to prevent bites and scratches.
- Measures to properly manage the disposal of animal feaces and urine, hence preventing environmental contamination.

How to avoid getting sick from your pet

The risk of acquiring diseases from pets can be reduced by paying attention to the following:

- Before selecting a pet, find out from the veterinarian which diseases the animal might be susceptible to. Ask about worms and parasites. Describe to the veterinarian all the environments where a pet will spend time, and other animals with which it will interact.
- Make sure to take good care of the pet and its environment, manage its behaviour, and provide for regular veterinary checkups.
- Ensure that the pet remains healthy, has all vaccinations and preventive medications as needed, and has effective flea and tick control. Ontario owners are required by law to vaccinate their cats and dogs against rabies.
- Don't put anything that the pet has had contact with into the mouth (this includes hair, scales, feathers, droppings or body fluids). That means no licks of the ice cream cone!
- Avoid inhaling the pet's secretions (no sleeping nose-to-nose), dried droppings (which can become airborne dust), litter dust, or water sources. All aquariums should have properly fitted lids.
- Wear disposable gloves and a mask, if necessary, when cleaning up areas soiled by pets. Use cleaning solutions and disinfect the area with an appropriate disinfectant. Dispose of cleaning debris in a plastic bag that is securely fastened.
- Wash hands thoroughly after contact with the pet, its faeces or body fluids, or items it has touched.

Precautions around pet therapy animals

All LTCHs and RHs should develop a policy for pet therapy. This type of program should only be instituted after careful consideration of resident allergies, physical constraints of the building to provide all the pet's needs, and potential fears of residents and staff of particular pets.[15, 47]

It is recommended that: [47]

- All resident, staff or visitor pets that visit the facility, as part of the pet therapy program, be cared for under supervision of a licensed veterinarian. As such, pets should be in good health, be up-to-date with vaccination according to provincial regulations and preventive medications (e.g. heartworm prevention) as determined by a licensed veterinarian. The animals should also be free of any parasites (e.g. fleas and ticks) and should have no sutures, open wounds, or obvious dermatologic lesions that could be associated with bacterial, fungal, or viral infections or parasitic infestations.
- All pets that are invited into the facility should be friendly, not aggressive, and well behaved. They should also be clean (e.g. bathing within 24 hours of a visit) to remove allergens in saliva, dander and/or urine and well-groomed to remove dead hair to minimize allergic responses.
- Some reptiles or amphibians (i.e. snakes, turtles, salamanders etc.) are not appropriate for pet therapy as they are known carriers of *Salmonella* bacteria that are easily transmissible on hands.

- Using non-human primates as therapy animals is not encouraged due to concerns over potential disease spread from and unpredictable behaviour of these animals
- Rodents, exotic species, wild/domestic animals (i.e. wolf-dog hybrids), and wild animals whose behaviour is unpredictable should be excluded from pet therapy.
- Incorporating young animals (under 1 years of age) into the pet therapy program is not encouraged because of issues regarding unpredictable behaviour and fecal/urinal elimination control. Also, the immune systems of very young puppies and kittens are not completely developed, placing the health of these animals at risk.
- No pets are allowed in areas where food is being prepared or served.
- Pets belonging to the facility must have someone assigned to care and maintain regular visits to a veterinarian. Visiting pets should be supervised by persons in good health who know the animals and their behaviour, and who are trained in the activities.

Concerns around service animals

A service animal is an animal trained to provide assistance to a person (an employee, a visitor, or a resident) because of a disability and is not considered a pet. In Ontario, a service animal is an animal for a person with a disability if it is readily apparent that the animal is used by the person for reasons relating to his/her disability, or if the person provides a letter from a physician or nurse confirming that the person requires the animal for reasons relating to the disability. Providers of goods or services are required by law to ensure that a person with a disability accompanied by a service animal is permitted to enter the premises with the animal and to keep the animal with him/her unless the animal is otherwise excluded by law.

There is no evidence to suggest that service animals pose a more significant risk of transmitting infection than people, as long as the animal is healthy, clean, vaccinated, well-behaved and well-trained. Service animals should, therefore, be allowed to enter areas where HCWs, visitors and residents can access without taking additional precautions to prevent disease transmission. Similarly, if a resident with weakened immune system is able to receive visitors without using protective garments or equipment, exclusion of service animals from this area would be unnecessary.

In determining if and when a service animal should be excluded from a particular area, the facility needs to assess if the animal poses a significant risk to the health or safety of other persons in a particular area that cannot be mitigated or eliminated by modifying policies, practices or procedures. Such assessments should be based on the actual behaviour of the particular animal, not on speculation about how the animal might behave. Consider also the nature of the risk (duration and severity), the likelihood that injury will occur, and whether reasonable modifications of policies, practices or procedures will mitigate the risk. The person with a disability should contribute to the risk assessment. Remember that a person with a disability is entitled to independent access, and a service animal cannot be excluded just because the facility perceives a lack of need for the animal.

While care of the service animal remains the responsibility of the person with the disability, the facility should discuss with the person around an alternate plan of care for the animal in the event the person is unable or unwilling to provide that care. After a service animal leaves the facility, standard cleaning procedures are sufficient for areas occupied by a service animal. For spills of animal urine, feces, or other body substances, follow the facility's procedure for cleaning up blood/body fluid spills for humans.

How to protect yourself from wild animals [17, 18, 19]

It is inevitable that wild animals may come on to the property. Protection from injuries and serious infections can be achieved by paying attention to the following:

- Prevent pets from having contact with wild or sick animals.
- Don't let pets run free. Keep them indoors at night.
- Stay away from unknown dogs and cats and all wildlife, including bats.
- Do not attempt to trap wild animals that are causing damage to the property. Instead, contact a professional animal control officer to remove nuisance animals.
- Do not trap or transport wild animals to a new location. This could spread disease.

- Do not keep wildlife as pets. It may be against the law.
- Report any animals behaving strangely to your local animal control office.
- Do not try to nurse sick animals to health.
- Do not touch dead or sick animals except to bury or dispose of them. Do so carefully, wearing protective gloves and making sure pets cannot get at the carcasses.
- Take measures to discourage wild animals from taking up residence on the property. Cover up potential entrances such as uncapped chimneys, loose shingles, and openings in attics, roofs and eaves. Contact a professional for advice.
- If you come in contact with any wild animals, please contact SMDHU Health Connection at 705-721-7520 or 1-877-721-7520.

What should I do if I'm bitten or scratched by any animal? [17, 18, 19]

- Wash the wound immediately with soap and water and contact your family physician.
- If human exposure to a rabid animal is suspected, consult with a doctor or go to the local emergency health care centre as soon as possible.
- Report any incident to SMDHU at 705-721-7520 or 1-877-721-7520 (this is required by Communicable Diseases – General Regulation under the Health Protection and Promotion Act, R.S.O. 1990, c.H.7). Include as much information as you can about the animal and if possible, the owner's name, address and phone number. Public health inspectors will use this information to contact the owner, check rabies vaccination certificates and decide what other actions are needed.