

ADDITIONAL PRECAUTIONS INTRODUCTION, IMPLEMENTATION AND DISCONTINUATION

1. Introduction

Additional Precautions are infection prevention and control interventions used when [Routine Practices](#) are not sufficient to prevent transmission of suspected or identified infectious agents. Additional Precautions may also be used when medical procedures increase the risk of transmitting microorganisms (e.g., aerosol generating medical procedures [AGMPs]).

Additional Precautions are based on the infectious agent's mode of transmission: Airborne, Droplet, and Contact. As some microorganisms can be transmitted by more than one route, Additional Precautions may need to be combined (e.g., Airborne/Contact, Droplet/Contact).

Refer to the [Microorganism Infectious Disease Table](#) and the [Clinical Presentation and Empiric Precautions Table](#) for when Additional Precautions are required (and what the precautions are).

2. Implementation of Additional Precautions

Implement Additional Precautions when patient assessment reveals symptoms suggesting a communicable infection are present. Do not wait for a specific diagnosis or microbiological confirmation prior to implementing Additional Precautions.

Follow the steps below when implementing Additional Precautions:

- 2.1 Arrange appropriate patient accommodation as required for the specific organism/disease/clinical presentation.
- 2.2 Post appropriate Additional Precautions sign on the door if patient is in a private room
 - If in a multi-bed room, post the sign on the door AS WELL AS an easily visible location in the room (e.g., on the privacy curtain)
 - Additional Precautions signage is available under [Ordering Information](#)
- 2.3 Obtain supplies, including appropriate Personal Protective Equipment (PPE), required for the specific type of Additional Precautions.
- 2.4 Dedicate patient equipment whenever possible. If not possible, clean and disinfect equipment between patients.

- 2.5 Do not overstock supplies in the patient room. Maintaining a stocking list can help manage supply quantities.
- 2.6 Arrange additional cleaning measures for the patient environment as appropriate and in consultation with site ICP. Consider organism, type of Additional Precautions, presence of outbreak, available accommodations, and level of environmental contamination.
- 2.7 Do not implement any infection prevention and control measures for linen and dishes; follow Routine Practices.
- 2.8 Discuss Additional Precautions with patient. Information Sheets are available on the [IP&C web page](#).
- 2.9 Notify:
 - The Physician
 - Infection Prevention and Control
 - Housekeeping
 - Family, if appropriate
 - Admitting or Utilization Management, if bed blockage is required
- 2.10 Write an order to implement the appropriate Additional Precautions:
 - Document in the patient record the type of Additional Precautions, and the date and time they were implemented.
- 2.11 Communicate Additional Precautions required prior to transport to another department, unit or facility.

When **Additional Precautions** are instituted, they are always used **in addition to [Routine Practices](#)**.

3. Ambulatory Care

In addition to the measures outlined in **Implementation of Additional Precautions**, Section 2 above:

- Clean and disinfect or drape horizontal surfaces such as patient chair, desk closest to patient, exam table, and so on with a cover such as a clean sheet, between patients on Contact Precautions, Droplet Precautions or combined Additional Precautions including either Contact Precautions or Droplet Precautions
- Schedule patient on Additional Precautions as last patient of the day where possible
- Minimize contact between symptomatic patients and others

- If shared room, maintain appropriate separation between patients; close curtains between beds or chairs

4. Impact of Additional Precautions on Quality of Care ^[6.3]

Although Additional Precautions, such as wearing gloves and single room accommodation, help to reduce transmission to other patients and staff, there may be negative impacts for the patient.

These include: ^[6.3]

- Limited contact with staff may result in reduced monitoring processes (e.g., recording of vital signs), medication errors and increased falls
- Fewer visits from family and friends often resulting in feelings of loneliness and decreased emotional support
- Psychological issues related to isolation such as anxiety, depression, sleep withdrawal, regression and hallucinations

Recent studies, however, have noted patients on Contact Precautions did not perceive a negative impact on their care, and often perceived precautions as an improvement in their care. Some patients valued the solitude afforded by Additional Precautions and the quietness and privacy of single rooms. Evidence also suggests single-room accommodation is associated with improved outcomes, including a reduced risk of health care-acquired infections. ^[6.3]

Psychological support for the patient should include steps to prevent time disorientation and support for patients and their families as appropriate. ^[6.3]

It is important Additional Precautions not be used any longer than necessary, and that frequent assessment of the risks of transmission be carried out in collaboration with IP&C, with the goal of removing precautions as soon as it is safe to do so. Modification of precautions may be required for medical purposes (e.g., to permit specialized testing), or on compassionate grounds. ^[6.3]

5. ADDITIONAL PRECAUTIONS DISCONTINUATION

It is important Additional Precautions are not used any longer than necessary; they must remain in place until there is no risk of microorganism transmission. Therefore frequent assessment of the risks of transmission must occur. Where periods of communicability are known, precautions may be discontinued at the appropriate time.

Guidance for duration of precautions can be referenced in the [Clinical Presentation/Microorganism/Infectious Disease Table](#).

5.1 Upon discontinuation of any Additional Precautions:

- Additional Precautions signage must remain in place until the room is cleaned and disinfected
- Write an order to discontinue Additional Precautions:
 - Document in the patient's health record the date and time the Additional Precautions were discontinued
- Wear appropriate PPE until the room has been cleaned and disinfected

5.2 Discontinuing [Airborne Precautions](#):

Perform Regular Client Room cleaning and disinfection upon discharge or discontinuation of Airborne Precautions. An Isolation Client Room cleaning/disinfection (i.e. terminal clean) is not required as organisms transmitted only via the airborne route do not contaminate objects or equipment in the patient environment.

- Upon discharge or discontinuation of Airborne Precautions allow sufficient time for the air to be cleared of aerosolized droplet nuclei ^[6.4] according to the [Air Exchange Table](#) in the Appendix (page 12.1). Ideally 99.9 minimally 99% of airborne microorganisms must be removed before it is safe to enter the room without an N95 respirator. Where room exchanges are unknown, maintain precautions for **one hour after** the patient is discharged or precautions are discontinued.

5.3 Discontinuing [Contact Precautions](#) and [Droplet Precautions](#):

When precautions are discontinued or the patient is moved, Isolation Client Room cleaning and disinfection of the room/bed space and bathroom are required.

Additionally the following is required:

- 5.3.1 Clean and disinfect reusable non-critical equipment with facility-approved disinfectant.
- 5.3.2 Send re-usable semi-critical or critical equipment to Medical Device Reprocessing Department for reprocessing.
- 5.3.3 Discard all disposable supplies and equipment.
- 5.3.4 Patient's personal items:
 - Upon approval of the patient clean/disinfect solid surface wipeable items with facility approved disinfectant
 - Personal papers and non-cleanable items may be taken home by the patient or family
 - With the patient's approval surface clean/disinfect electronic equipment, e.g., lap tops, cell phones, according to manufacturer's instructions
 - Where possible, provide freshly laundered attire for the patient to wear upon discontinuation of Additional Precautions
 - Personal clothing should be taken home and laundered by the family or patient. Where this isn't possible, or for clothing that isn't cleaned/disinfected, securely bag and store until patient discharge
 - Securely bag and store any other personal items the patient does not want cleaned/disinfected until patient discharge
 - Discard unused hospital medications still in the patient's room according to facility policy upon patient discharge.
 - Personal medications may be taken home by patient or family

6. References

- 6.1 Canadian Tuberculosis Standards, 7th Edition. (2014, February 17). Public Health Agency of Canada. Available at: <http://www.phac-aspc.gc.ca/tbpc-latb/pubs/tb-canada-7/appendix-annexe-e-eng.php>.
- 6.2 Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings, 2005. MMWR 2005; 54 (No. RR-17) CDC. (2005, December 30). Available at: <https://www.cdc.gov/mmwr/PDF/rr/rr5417.pdf>.
- 6.3 Routine Practices and Additional Precautions in All Health Care Settings, 3rd edition. (2012, November). Provincial Infectious Diseases Advisory Committee (PIDAC). Available at: http://www.publichealthontario.ca/en/eRepository/RPAP_All_HealthCare_Settings_Eng2012.pdf.
- 6.4 Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care. (2012, April). Manitoba Health. Available at: <http://www.gov.mb.ca/health/publichealth/cdc/docs/ipc/rpap.pdf>.
- 6.5 WRHA Housekeeping Department Standard Operating Procedure 3.1 available at: http://home.wrha.mb.ca/facilitymgmt/housekeeping/files/Procedure_3.1.pdf.
- 6.6 WRHA Housekeeping Department Standard Operating Procedure 3.2 available at: http://home.wrha.mb.ca/facilitymgmt/housekeeping/files/Procedure_3.2.pdf.
- 6.7 WRHA Housekeeping Department Standard Operating Procedure 3.3 available at: http://home.wrha.mb.ca/facilitymgmt/housekeeping/files/Procedure_3.3.pdf.
- 6.8 WRHA Housekeeping Department Standard Operating Procedure 3.4 available at: http://home.wrha.mb.ca/facilitymgmt/housekeeping/files/Procedure_3.4.pdf.

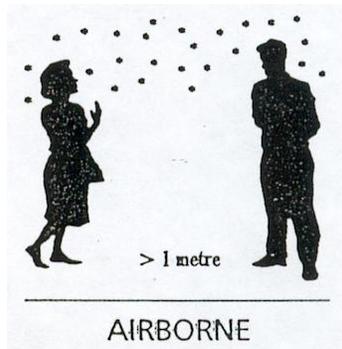


4. Airborne Precautions

4.1 Introduction

Airborne Precautions are required for patients diagnosed with, or suspected of having an infectious microorganism transmitted by the airborne route. Refer to 3.3, Airborne transmission, for a description of airborne transmission.

Airborne Precautions are followed in addition to Routine Practices. Routine Practices shall be adhered to at all times by all healthcare workers



4.2 Indications for Airborne Precautions

Airborne Precautions are implemented according to the Clinical Presentation/Microorganism/Infectious Disease Table. Refer to this table for specific disease/microorganism information. Refer to Implementation of Additional Precautions on page 5.1.

4.3 Accommodation

Single room with negative pressure ventilation in relation to surrounding areas

NOTE: When a negative pressure isolation room is not available, or in the event of an outbreak or exposure where large numbers of patients require Airborne Precautions, consult Infection Prevention and Control before patient placement to determine room placement and/or cohorting of patients.



- The door shall remain closed whether or not the patient is in the room
 - The door shall remain closed for one hour following the discontinuation of precautions
- The patient shall be confined to the room
 - When exiting the room for medically essential purposes, the patient shall wear a surgical/procedure mask
 - The patient shall perform hand hygiene after removal of the mask
 - When there are exceptional circumstances, the patient may leave the room in consultation with Infection Prevention and Control

Rooms should have dedicated toilet, hand hygiene, and bathing facilities.

Facilities that cannot provide properly ventilated (e.g., negative pressure) rooms should transfer a patient with infectious forms of tuberculosis to a facility with such accommodation. These arrangements shall be coordinated in advance, with receiving facilities. The following directives are implemented until the patient can be transferred to a facility with adequately ventilated negative pressure rooms

- Single room with door closed
- Physical separation of the patient if a single room is not available
 - Mask the patient with a surgical/procedure mask, and
 - Provide N95 respirators for everyone entering the room

For Measles or Varicella, facilities without negative pressure rooms and where transfer is not feasible, maintain patient in a single room with the door closed. These patients should be placed on wards where there are no susceptible, immunocompromised patients.

If numbers of negative pressure rooms are limited, set priority for use according to the impact of potential airborne transmission (e.g., infectious Tuberculosis > Measles > Varicella > disseminated zoster > extensive localized zoster).

4.4 Healthcare Workers

Healthcare workers should be aware of their immunity status

- Non-immune healthcare workers should not care for patients with vaccine-preventable airborne diseases (e.g., measles, chickenpox) unless absolutely necessary. If it is absolutely necessary to care for one of these patients then they must wear a N95 respirator to enter the isolation room.



4.5 Hand Hygiene

Healthcare workers shall perform hand hygiene before leaving the isolation room, and after removal of their N95 respirator.

4.6 Personal Protective Equipment (PPE)

Masks/Respirators

N95 respirators* shall be available for persons entering the isolation room.

Individuals who are immune to vaccine-preventable diseases (e.g., measles, chickenpox) do not need to wear N95 respirators to go into the isolation room. This should be documented in the Additional Instructions section of the Airborne Precautions sign.

Individuals who are not immune or are uncertain of their immunity shall not enter the room unless absolutely necessary. If it is absolutely necessary to enter the room, then they shall wear a N95 respirator.

N95 respirators shall be

- Fit-tested for healthcare workers, as directed by Occupational Health
- Seal-checked by healthcare workers prior to each use. Seal checking procedure is as follows:
 - Cover respirator with both hands
 - Perform one of the following:
 - Inhalation Test: If respirator collapses slightly there is an adequate seal
 - Exhalation Test: If no air escapes respirator, there is an adequate seal
- Worn once
 - Changed:
 - When wet
 - If the front of the N95 respirator has been touched, and/or
 - When contaminated with patient secretions
 - Removed in a manner preventing contamination. Refer to Removal of Personal Protective Equipment in Appendices 6 and 7
 - Removed after exit of the isolation room/cubicle

N95 respirators shall never dangle around the neck.

*N95 respirators shall be certified by the National Institute of Occupational Safety and Health (NIOSH) with an N95 efficiency rating or better.



4.7 Patient Transport

Patient transport out of the room is for medically essential purposes only.

In advance of the procedure, notify the Patient Transport Services and the receiving department regarding the need for Airborne Precautions.

Maintain Airborne Precautions while the patient is outside the isolation room

- Healthcare workers wear N95 respirators when transporting patients requiring Airborne Precautions
- The patient wears a surgical/procedure mask and performs hand hygiene prior to leaving the room
- The patient with skin lesions associated with varicella, smallpox, or draining wounds caused by *M. tuberculosis* shall have them securely covered
- Consult Respiratory Therapy if the patient (adult and small child) has an artificial airway (e.g., ETT) and transport according to these guidelines
 - **Oral/nasal pharyngeal airway:** Patient wears a surgical/procedure mask over their mouth and nose
 - **Oral/nasal pharyngeal airway manually ventilated:** N100 filter or N100 filter/Heat Moisture Exchanger (HME) between the resuscitation bag and the patient or a N100 filter on the exhalation port of the resuscitation bag
 - **Oral/nasal endotracheal tube:** N100filter/HME on the ETT*
 - **Tracheostomy Tube:** N100 filter/HME on the tracheostomy tube*
- Consult Respiratory Therapy for guidance regarding the transport of infants in incubators
- The patient performs hand hygiene after removal of the surgical/procedure mask

*If an air leak is present, loosely cover the mouth or nose, around the tube with a facecloth or similar cloth. Cloths used to cover the site of the leak shall be considered contaminated.

4.8 Patient/Family

The patient, and/or family should be educated about the nature of the patient's infectious disease, the precautions to adhere to, and the length of



time the precautions will be in place. Refer to the 'Patient/Family Information Sheet on Airborne Precautions' in Appendices 12.1 or 13.

Instruct the patient/family regarding Respiratory Hygiene/Cough Etiquette

- When coughing or sneezing, cover his/her nose and mouth with a tissue, or cough into his/her shoulder
- Immediately dispose of the tissue in the appropriate waste receptacle, and,
- Perform hand hygiene

Refer to the Cover Your Cough Pamphlet in Appendix 9

Instruct the patient about the appropriate use and management of PPE

- How to correctly apply and wear a surgical/procedure mask
- How to remove the surgical/procedure mask without contaminating oneself
- Know the procedure and the importance of hand hygiene prior to leaving the room and following removal of the surgical/procedure mask

The family shall be instructed about the appropriate use and management of PPE

- If required, instruct the family about assisting with application of the surgical/procedure mask for the patient
 - Instruct the family about how to correctly apply a N95 respirator, including seal check

Instruct the patient and family about preventing transmission of the infectious disease to his/her family, and friends during his/her hospital stay and upon his/her return to the community.

Instruct the patient and family about the procedure, and importance of performing hand hygiene.

4.9 Visitors

Visitors shall be informed about the precautions to adhere to.

Instruct the visitors about the procedure, and importance of performing hand hygiene.

If susceptible to the airborne microorganism requiring Airborne Precautions, visitors should not visit unless there are exceptional

circumstances. If this is the case, consult Infection Prevention and Control prior to the visit.

The nurse shall talk with visitors before they enter the isolation room, and

- Assess risk to the health of the visitor and the risk of the visitor transmitting infection
- Shall instruct the visitor about the appropriate use of respirators and other precautions

Keep the number of visitors to a minimum (at the discretion of the unit staff).

Appendix C: Airborne Infection Isolation Room (AIIR) Prioritization

Formerly known as a negative pressure isolation room, an AIIR is a single-occupancy patient care room used to isolate those with suspected or confirmed airborne infectious diseases. The control of environmental factors minimizes the transmission of infectious agents transmitted via the airborne route. AIIRs provide negative pressure in the room and direct exhaust of air from the room to the outside of the building or recirculation of the air through a HEPA filter before returning to circulation.

Diseases known to be transmitted person to person by the airborne route are tuberculosis (TB), rubeola (measles), and varicella (chickenpox). Most respiratory infections are spread via Droplet/Contact transmission and do not require use of an AIIR. However, a precautionary approach for novel respiratory agents combines Airborne Precautions and Droplet/Contact Precautions until the epidemiology of the novel agent is established. ^[1]

Admission or continued admission to an AIIR will occur with ongoing assessment of factors such as, but not limited to: the immune status of patients and staff; stage of convalescence; and presence of communicable symptoms. The following is a hierarchy describing the likely degree of infectious risk imposed by the diagnoses/queried diagnoses associated with the patient, and is intended to be used as a guideline along with clinical judgment/ risk benefit analysis. The highest to lowest recommended priority for a patient to be admitted or remain in the AIIR is as follows:

- | | |
|---|--|
| Highest | 1. Novel Pathogens i.e., Severe Respiratory Illness (SARI) |
|  | 2. Laboratory Confirmed Multi-drug Resistant or Extensive Drug resistant (MDR/XDR) Respiratory TB |
| | 3. Measles |
| | 4. Laboratory Confirmed Active Respiratory TB (sputum smear positive for AFB or culture positive for MTB) or clinically-confirmed (committed to TB treatment) with priority to most infectious |
| | 5. TB under investigation |
| | 6. Varicella |
| | Lowest |

When requests for patient prioritization do not follow the suggested list, Infection Prevention and Control/designate shall determine the priority for use of the AIIR.

Upon discovery of a patient with suspect or confirmed infection requiring Airborne Precautions/AIIR, the patient shall have a procedure or surgical mask applied until transfer into appropriate accommodation. Refer to the [Airborne Precautions Protocol](#) for accommodation of patients who require Airborne Precautions.

References (Appendix C):

1. Best Practices for prevention, surveillance and infection control management of novel respiratory infections in all health care settings. (2015, September). Provincial Infectious Diseases Advisory Committee (PIDAC). Available at: https://www.publichealthontario.ca/en/eRepository/Best_Practices_Novel_Respiratory_Infections.pdf.
2. Guidelines for environmental infection control in health-care facilities. Infection-Control and Ventilation Requirements for Operating Rooms. Morbidity and Mortality Weekly Report (MMWR) /52 (RR10): 1-42 section V. (2003, June 6). Centre for Disease Control (CDC) and Healthcare Infection Control Practices Advisory Committee (HICPAC). Available at: <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5210a1.htm>.
3. Guidelines for preventing the transmission of mycobacterium tuberculosis in health-care settings, Morbidity and Mortality Weekly Report (MMWR). (2005). Centre for Disease Control (CDC). Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5417a1.htm>.
4. Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care. (2012 April). Manitoba Health. Available at: <http://www.gov.mb.ca/health/publichealth/cdc/docs/ipc/rpap.pdf>.

Contact Precautions Protocol

1. Introduction

Contact Precautions are required for patients diagnosed with or suspected of having infectious microorganisms transmitted by the contact route.

Refer to 3.3, Direct Contact Transmission and Indirect Contact Transmission.

Contact Precautions are followed in addition to Routine Practices.

Routine Practices shall be adhered to at all times by all healthcare workers.

2. Indications for Contact Precautions

Implement Contact Precautions empirically for patients with conditions listed in the Clinical Presentation and Empiric Precautions Table while waiting for cause to be determined at <http://wrha.mb.ca/extranet/ipc/files/manuals/acuteCare/ClinicalTable.pdf>

If the specific organism or infectious disease has been established, follow the measures outlined in the Microorganism, Infectious Disease Table.

The need to establish Contact Precautions may differ between pediatric and adult patients who are incontinent or unable to comply with hygiene (e.g., cognitively impaired adult patients).

Contact Precautions are indicated when Routine Practices are not sufficient to control direct or indirect contact transmission; for instance:

- If the organism has a low infective dose (such as Norovirus)
- If the organism may be transmitted from the source patient's intact skin (such as MRSA)
- If there is potential for widespread environmental contamination (such as *C.difficile*)

3. Source Control

- Place a Contact Precautions sign on the door/bedspace.
- Restrict patients on Contact Precautions from participating in non-essential group activities and pet therapy programs.

4. Accommodation

Single Room (preferred)

- A single room with a private toilet (or designated commode chair), designated patient sink and a dedicated staff hand washing sink is preferred.
- Door may remain open.
- When single rooms are limited perform a risk assessment to determine patient placement and suitability for cohorting. Prioritize single rooms to patients with certain conditions/presentations (e.g., uncontained drainage, stool incontinence, young age, and cognitive impairment)
- Cohort patients who are infected or colonized with the same microorganism. For selecting cohort(s) of patients with Antibiotic Resistant Organisms (AROs), refer to Antibiotic Resistant Organisms Protocol.

When cohorting is not feasible

- Do not place a patient on Contact Precautions in the same room as a patient who is at high risk for complications if infection occurs, or with conditions/presentations that may facilitate transmission (e.g., indwelling devices, open wounds, immunocompromised condition).
- Assign a designated commode or toilet to the patient with diarrhea. Any patient with diarrhea (even when etiology is still unknown) should not share a toilet or commode with another patient.
- Where possible, close privacy curtains between beds to minimize opportunities for direct contact.
Ensure there is a minimum of 1, preferably 2 meter separation between patient “cubicles”, and ensure family members/visitors are able to comply with the required precautions.

For newborn nurseries

- A single room is not necessary, providing there is required spacing between infant stations to minimize opportunities for direct contact. If multiple infants are kept in a single room, ensure there is preferably a 2 meter separation between infant stations, and ensure family members or designated visitors are able to comply with the required precautions.

5. Hand Hygiene

Healthcare workers shall perform hand hygiene according to the 4 moments of hand hygiene. Refer to Routine Practices.

6. Personal Protective Equipment (PPE)

Provide Personal Protective Equipment outside the patient room, cubicle or when available, the anteroom. Perform hand hygiene prior to putting on PPE.

Gloves

- Wear gloves to enter the room, cubicle or the patient's designated bed space within a shared room.
- Remove gloves and perform hand hygiene on exit from the room, cubicle or patient bedspace.
- Change gloves between care activities and procedures with the same patient, e.g., after handling an indwelling urinary catheter, or suctioning an endotracheal tube. This prevents contamination of clean body sites or the patient's environment.
- Perform hand hygiene after glove removal.

Gowns

- Wear a long sleeved gown if it is anticipated clothing or forearms will be in direct contact with the patient or with environmental surfaces or objects in the patient care environment. If a gown is to be worn, put it on before entry into the room, cubicle or patient's designated beds pace in shared rooms
- If a healthcare worker enters a Contact Precautions room without a gown and is then required to perform an activity requiring a gown, he/she must remove and discard gloves, clean hands, put on a new, clean gown, and apply fresh gloves before returning to provide care.
- Remove gown before leaving the patient's environment; place it into a hands free receptacle in the patient room/cubicle/bedspace.
- Do not wear the same gown for more than one patient.
- Do not wear the same gown on repeated occasions (i.e., don't remove then reapply the same gown)
- Remove and replace the gown if it becomes wet or visibly contaminated.

Note:

Individuals may wear cultural or faith-related head coverings in a Contact Precautions room. Cultural or faith-related head coverings shall be considered equivalent to/treated as the individual's hair.

7. Patient Transport

Avoid room transfer within facility unless medically indicated. If medically indicated room transfer is unavoidable, advise patient transport and the receiving unit of necessary precautions in advance.

Inter-Facility Patient Transport

Precautions relevant to the Patient for Transfer

- Use a clean stretcher or wheelchair
- Cover all wounds
- Patient to perform hand hygiene on leaving room
- Patient to wear clean clothes, housecoat or cover gown; no gloves required for the Patient

Precautions relevant to the Health Care Worker for Transfer

- Follow Contact Precautions to enter and exit the room
- Remove PPE before leaving the room
- Perform hand hygiene before contact with the patient, after removal of PPE and before leaving the room
- Apply clean gloves and gown outside the room to transport patient

Precautions relevant to the Transport Service

- Follow Contact Precautions inside the patient room
- Follow Contact Precautions at the receiving facility, to place patient in their room
- Consider wheelchair/stretchers used in the transport as contaminated. Clean and disinfect prior to removal from isolation space or use with another patient
- Disinfect vehicle surfaces and any equipment that was in contact with the patient with facility-approved disinfectant

Visitor Precautions for Transporting the Patient

- Perform hand hygiene before leaving the room
- Visitors are not required to wear gloves and gown outside the room

8. Intra facility transport tests and treatments.

- Notify the transport service and receiving department, in advance of medical tests/procedures/room transfer, regarding the need for Contact Precautions. During out of room procedures, a health care worker in contact with the patient must maintain Contact Precautions. A dedicated clean person may be used to minimize environmental contamination.
- Before patient use, cover the clean transport chair/stretchers with a cover sheet, and place a clean cover sheet over the patient.
- If the patient's bed or personal wheelchair is used for transport, wipe the steering handles and side rails with disinfectant and allow required wet contact time prior to removing it from the room. After preparing the patient for transport, remove gown and gloves before exiting the room and perform hand hygiene.
- Apply clean PPE once out of the room/cubicle/bed space, to transport patient.
- Take care not to contaminate the environment with soiled gloves during transport.
- Disinfected handles of the transport chair/stretchers or the patient bed are considered clean until gloves have direct contact with the patient or patient equipment.
- After use and while wearing PPE, clean and disinfect the transport chair/stretchers at the test/treatment destination if transport is complete, or upon return of the patient to the unit. Remove PPE after cleaning and disinfecting the transport chair/stretchers.

9. Patient Therapy

Allow the patient out of his/her room as required for their care plan. Supervise the patient if compliance with precautions is inadequate. Following a risk assessment of cognitive ability, hygiene, continence, and lack of draining wounds, consideration may be made for patients to leave their rooms with supervision if compliance with precautions is inadequate.

Before the patient leaves the room

- All secretions/excretions are contained.
- The patient performs hand hygiene, with assistance as needed, prior to putting on a new clean housecoat or new cover gown with ties to the front.
- Patient does not wear yellow isolation gowns.

When the patient is outside the room

- The patient performs hand hygiene, with assistance as needed, immediately on exiting the room and when indicated to prevent contamination of the environment (e.g., after contact with clothing under cover gown, after using Kleenex).
- Staff must remove PPE, and perform hand hygiene, before leaving the patient room
- If staff are assisting/supervising the patient outside of the room/cubicle/bed space, and contact with the patient and/or his/her equipment is anticipated, apply clean PPE. If gloves are contaminated during patient supervision (e.g., used for direct care of patient or handling patient equipment) remove gloves and perform

hand hygiene before handling items in public areas, elevator buttons, door knobs, hand rails, or other patient's equipment.

- Wipe all surfaces having contact with the patient with facility approved disinfectant.

The following instructions are for staff when continuous assistance of the patient is required. E.g., when ambulating a patient with a fall risk.

- Staff put on clean PPE immediately prior to assisting the patient to put on a clean cover gown
- Staff continues to wear same PPE outside the room for one to one assist with the patient unless PPE is visibly soiled. If gloves are contaminated during patient supervision (e.g., used for direct care of patient or handling patient equipment) remove gloves and perform hand hygiene before handling items in public areas, elevator buttons, door knobs, hand rails, or other patient's equipment.

10. Equipment and Environment

- If reusable equipment must be used, clean/disinfect with facility-approved disinfectant prior to removal from room
- Keep minimal supplies in patient room. Do not overstock
- Use dedicated personal supplies, e.g., combs, razors, lotions, creams, and soaps.
- Discard supplies that cannot be appropriately disinfected or sterilized when patient is discharged, deceased, or Contact Precautions discontinued
- Upon discharge, bag personal articles that cannot be disinfected (e.g., books, magazines, toys, playing cards) and give to the patient or discard

11. Health Record/Health Record Documents, Mobile computers for electronic documentation, Other Papers

Written records should not go into the room. When there are documents that must enter the room (e.g., Power of Attorney, Paneling Papers, Advanced Care Directive). There are no special disinfection requirements for confidential papers taken into the patient room. Handle papers are per routine practice upon removal from the room:

- Wipe the table on which the document is signed with a facility-approved cleaner/disinfectant prior to signing
- Assist the patient to perform hand hygiene with alcohol-based hand rub prior to signing/handling the document
- Wipe the pen with a facility-approved disinfectant after signing

If the Medication Administration Record (MAR) has been in the isolation room:

- Wipe the pen and the external surface of the MAR with facility approved disinfectant upon leaving.
- Place mobile computer at the entrance of the room/cubicle/bed space and maintain the computer as clean (i.e., change gloves and clean hands between care of the patient and use of the computer. Alternately, a plastic cover may be placed on the computer keyboard. Remove the plastic cover and clean the keyboard, keyboard tray and mouse with facility approved disinfectant before removing from the room or upon patient discharge if dedicated to the room.

- When a wall mounted or fixed computer within the room is used for documentation, remove gloves, clean hands and put on new gloves to use the computer keyboard. After using the computer, remove gloves, clean hands and put on clean gloves to provide patient care. Avoid cross contamination from computer to patient and patient to computer.
- If the health record is required to accompany the patient for tests or treatments, place in a protective cover (i.e., plastic bag) to prevent contamination. Otherwise, have a dedicated staff person carry the chart without contaminating self or the chart

If the outside of the chart becomes contaminated, clean and disinfect with facility approved disinfectant

Other papers that must be brought into the patient room (e.g., legal)

- Perform hand hygiene
- Apply gown and/or gloves as required to prevent contact with the patient or the environment.
- The document can be taken into the room with or without a disposable document holder.
- Assist patient to perform hand hygiene
- Assist patient, as required, in signing/completing paperwork.
- Disinfect the pen and allow required wet contact time.
- Remove PPE inside the patient room and perform hand hygiene.
- Pick up the document from the surface/table and leave the room.
- Perform hand hygiene.
- If a disposable folder is used, take it to the doorway where a second person can remove the paper. Discard folder in the room, remove gloves inside the patient room and perform hand hygiene on leaving the room.

12. Cleaning

- Clean and disinfect all horizontal and frequently touched surfaces daily, and immediately when soiled.
- Facility-approved disinfectant must achieve manufacturer's recommended contact time on all surfaces to ensure disinfection
- During an outbreak more extensive and frequent cleaning with the facility-approved disinfectant may be required. Any changes will be recommended by the Outbreak Management Team
- Follow Regional/Facility Standard Operating Procedure, Cleaning of Isolation Discharge Client Room/Cleaning of Occupied Client Isolation Room
- Additional cleaning measures may be required in situations when continued transmission of specific infectious agents occurs, e.g., *C. difficile*, norovirus, rotavirus.
- When precautions are discontinued or the patient is moved, isolation room discharge cleaning of the room/bed space and bathroom, changing of privacy curtains and cleaning or changing of string/cloth call bells and/or light cords is required. Leave the contact precautions sign on the door until terminal cleaning is completed.

13. Education of Patients, Families and Visitors

Inform visitors about Contact Precautions and provide instruction on how to enter and exit the room safely, including:

- Information regarding how germs are spread
- When and how to perform hand hygiene according to the 4 moments of hand hygiene
- How to put on, take off and dispose of PPE when it is worn for direct care of a patient.

Refer to the Patient, Family and Visitor Contact Precautions Information Sheet and Patient Family and Visitor Contact Precautions Pamphlet, Appendices 12.3 and XX13.

In the adult setting

- Visitors perform hand hygiene on entering and exiting the room.
- Visitors are instructed to wear gowns and gloves when providing direct care to the patient e.g. when helping with bathing, dressing, toileting, or changing soiled items. In addition, visitors should have access to the same PPE as staff and be instructed on the use of gowns to minimize contact with the environment e.g. where environmental soiling or contamination of the patient room exists.

In the pediatric setting

- PPE may not be necessary for parents or caregivers exposed pre-hospital who are providing the usual care of the patient, provided the parent or caregiver is not visiting other patients

14. Management of Visitors

Inform visitors to see the nurse prior to entering the room for the following purposes:

- Provide instruction and educational resources on hand hygiene and PPE.
- Assess the risk to the health of the visitor, the risk of the visitor transmitting infection, and the ability of the visitor to comply with precautions.
- Keep the number of visitors to a minimum (as determined by a risk benefit analysis).
- Only essential visitors (e.g. parent, guardian or primary caretaker) should be allowed.
- Restrict visitors to visiting only one patient.
- If the visitor must visit more than one patient, instruct the visitor to use the same barriers as the health care workers and perform hand hygiene before going to the next patient room.

15. References

[Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care](http://www.gov.mb.ca/health/publichealth/cdc/docs/ipc/rpap.pdf). (April 2012). Manitoba Health. Available at:
<http://www.gov.mb.ca/health/publichealth/cdc/docs/ipc/rpap.pdf>.

Protocol Contact:

Janice Briggs, Infection Prevention & Control Specialist, WRHA Infection Prevention & Control

CONTAINMENT PRECAUTIONS PROTOCOL

1. Introduction

Containment Precautions are required to prevent the transmission of highly contagious or virulent organisms (confirmed or suspected) transmitted by the direct or indirect contact route. These may be new, emerging organisms or an organism determined to cause severe illness/outcomes and/or severely contaminate the environment. Containment Precautions extend beyond [Contact Precautions](#) to prevent contamination of the environment and transmission to others.

Containment Precautions are followed in addition to [Routine Practices](#). Routine Practices shall be adhered to at all times by all healthcare workers.

2. Indications

Containment Precautions are indicated when [Routine Practices](#) and [Contact Precautions](#) are not sufficient to control transmission through direct or indirect contact transmission within a healthcare facility.

Implement Containment Precautions:

- As indicated in the [Microorganism, Infectious Disease Table](#) if the specific organism or infectious disease is suspected or known
- Empirically for patients with symptoms listed in the [Clinical Presentation and Empiric Precautions Table](#)
- Or as directed by the WRHA IP&C Program

Notify site Infection Control Professional/designate if Containment Precautions are implemented during business hours. After hours, notify:

- Dr. Evelyn Lo @ pager: 204-932-6538 for St. Boniface Hospital concerns.
- Dr. John Embil @ pager: 204-931-9538 for all other hospitals' concerns.
- Attending Pediatric ID Physician @ 204-787-2071 for pediatric concerns.

Examples of organisms for which Containment Precautions are implemented include:

- [Multidrug resistant *Candida auris*](#): an opportunistic fungal pathogen, which is known to cause invasive healthcare-associated infections. *C. auris* is found to contaminate and persist in the environment and may spread between patients. MDR *C. auris* is difficult to eradicate due to its limited treatment options and non-specific presentation.
- [Carbapenemase Producing *Enterobacteriaceae* \(CPE\)](#): Gram-negative bacilli that are highly resistant to beta-lactam antibiotics, as these are often the antibiotics considered to be the last line of defense, infections caused by these organisms have high morbidity and mortality rates. CPE are easily transmitted within hospitals, particularly between hospitalized patients.

3. Source Control

- Place a [Containment Precautions sign](#) on the door

4. Accommodation

4.1. Room type

- A single room with a private toilet (or designated commode chair), designated patient sink and a dedicated staff hand washing sink is strongly recommended
- Door may remain open

4.2. Cohorting

- When single rooms are limited:
 - consult site Infection Control Professional/designate regarding roommate selection during business hours
 - after hours, consult:
 - Dr. Evelyn Lo @ pager: 204-932-6538 for St. Boniface Hospital concerns.
 - Dr. John Embil @ pager: 204-931-9538 for all other hospitals' concerns.
 - Attending Pediatric ID Physician @ 204-787-2071 for pediatric concerns.
 - perform a risk assessment to determine patient placement and suitability for cohorting, in consultation with Infection Control Professional/designate
 - prioritize single rooms to patients with certain conditions/presentations (e.g., uncontained drainage, stool incontinence, young age, and cognitive impairment)

5. Hand Hygiene

Healthcare workers shall perform hand hygiene according to the [4 Moments of Hand Hygiene](#). Refer to [Routine Practices](#) for additional information.

6. Personal Protective Equipment (PPE)

Provide Personal Protective Equipment outside the patient room, cubicle or when available, the anteroom. Perform hand hygiene before [putting on PPE](#).

6.1. [Gloves](#)

At all times

- Put on gloves before entering the room even if no contact with the patient or the patient environment is anticipated
- Remove gloves and perform hand hygiene when leaving the patient's room or bedspace

- Change gloves between care activities and procedures with the same patient, e.g., after handling an indwelling urinary catheter, or suctioning an endotracheal tube. This prevents contamination of clean body sites or the patient's environment
- Perform hand hygiene after removing gloves

6.2. Gowns

At all times

- Wear a long sleeved gown to enter the room even if no contact with the patient or the patient environment is anticipated
- Remove gown when leaving the patient's room or bedspace
- Perform hand hygiene
- Do not wear the same gown for more than one patient
- Do not wear the same gown on repeated occasions (i.e., don't remove a gown and then put the same gown on again)
- Remove and replace the gown if it becomes wet or visibly soiled

Faith or cultural head coverings do not require covering or removing in Containment Precautions rooms.

7. Transport

- Notify the site Infection Control Professional (ICP) or designate of any inter-facility transports **BEFORE** the transport occurs.
- For after-hours transport if ICP has not been previously notified, contact:
 - Dr. Evelyn Lo @ pager: 204-932-6538 for St. Boniface Hospital concerns.
 - Dr. John Embil @ pager: 204-931-9538 for all other hospitals' concerns.
 - Attending Pediatric ID Physician @ 204-787-2071 for pediatric concerns.
- Avoid room transfer within facility unless medically indicated.
- Only transport patient if medically indicated
- Perform tests and procedures in the patient room whenever possible
- Inform the receiving department or facility and transport service of the need for Containment Precautions, **before** the transport,
- Cover the clean transport chair or stretcher with a clean sheet, before putting the patient on it. Put a clean sheet over the patient
- Use a clean stretcher or wheelchair if available
- If the patient's bed or personal wheelchair is used for transport, wipe the steering handles and side rails with disinfectant and allow required wet contact time before removing it from the room.
- After preparing the patient for transport, remove gown and gloves before exiting the room and perform hand hygiene
- Disinfected handles of the transport chair or stretcher or the patient bed are considered clean until gloves have direct contact with the patient or patient equipment. Refer to [specific disease protocol](#) for applicable disinfectant
- After use and while wearing PPE, clean and disinfect the transport chair or stretcher at the test/treatment destination if transport is complete, or upon return of the patient to their room.
- Remove PPE after cleaning and disinfecting the transport chair or stretcher

7.1. Patient

- Contain all secretions and excretions
- Cover all wounds
- Perform hand hygiene
- Put on a new clean housecoat or new clean patient gown; may use blue patient gown, with ties to the front
- Patient does not wear a yellow isolation gown or gloves

7.2. Healthcare Worker and Visitor

- Follow Containment Precautions to enter and exit the room
- Remove PPE before leaving the room
- Perform hand hygiene:
 - before putting on PPE
 - after taking off PPE, in the room
 - before putting on new PPE
 - after patient or patient environment contact
- Apply clean gown and gloves outside the room to transport patient
- During out of room procedures, health care workers must maintain Containment Precautions. A dedicated clean person may be used to minimize environmental contamination
- Take care not to contaminate the environment with soiled gloves during transport

7.3. External Healthcare Workers

- Follow Containment Precautions inside the patient room
- Follow Containment Precautions at the receiving facility, to place patient in their room
- Consider wheelchair or stretcher used in the transport as contaminated. Clean and disinfect before removal from isolation space or use with another patient
- Disinfect vehicle surfaces and any equipment in contact with the patient with facility-approved disinfectant (refer to [specific disease protocol](#) for applicable disinfectant)

8. Therapy (care outside the patient room)

- Consult the site Infection Control Professional/designate before patient therapy
- Perform a risk assessment to decide if the patient is appropriate to leave their room FOR PATIENT THERAPY consider:
 - cognitive ability
 - hygiene
 - continence
 - draining wounds
- Supervise the patient for compliance with precautions if out of their room.

8.1. Before the patient leaves their room

- Contain all secretions and excretions
- Cover all wounds
- The patient performs hand hygiene
- Put on a new clean housecoat or new clean patient gown; may use blue patient gown, with ties to the front
- Patient does not wear an isolation gown or gloves

8.2. When outside the patient room

- The patient performs hand hygiene, with assistance as needed, when exiting the room and when indicated to prevent contamination of the environment:
 - after touching their nose
 - after touching their mouth
 - after touching their clothes
- Staff remove PPE, and perform hand hygiene, before leaving the patient room
- Perform hand hygiene and apply clean PPE when assisting or supervising the patient outside of the room
- Staff should continue to wear same PPE outside the room for one to one assist with the patient unless PPE is visibly soiled. If gloves are contaminated (e.g., used for direct care of patient or handling patient equipment), remove gloves and perform hand hygiene before handling items in public areas, elevator buttons, doorknobs, handrails, or other patient equipment
- Wipe all surfaces the patient touches, with the facility-approved disinfectant specified in the [specific disease protocol](#)

9. Equipment and Environment

- Dedicate patient care equipment to patients on Containment Precautions.
- If reusable equipment must be used, clean and disinfect with facility-approved disinfectant before removal from room. Refer to [specific disease protocol](#) for applicable disinfectant
- Keep minimal supplies in patient room. Do not overstock
- Use dedicated personal supplies (e.g., combs, razors, lotions, creams, and soaps)
- Discard supplies that cannot be disinfected or sterilized when patient is discharged, deceased, or Containment Precautions are discontinued.
- Upon discharge, bag personal articles that cannot be disinfected (e.g., books, magazines, toys, playing cards) and give to the patient or discard

10. Health Record, Documents and Mobile computers

10.1. Health Records

- Use facility-approved disinfectant to clean and disinfect outside of if it is contaminated. Refer to [specific disease protocol](#) for applicable disinfectant
- If the health record must accompany the patient for tests or treatments, place in a protective cover (i.e., plastic bag) to prevent contamination. Otherwise, have a dedicated staff person carry the chart

- If the Medication Administration Record (MAR) enters in the patient's room, wipe the external surface of the MAR binder with facility approved disinfectant when it leaves the patient room. Refer to [specific disease protocol](#) for applicable disinfectant

10.2. Documents

Do not take documents into the patient's room if they are not needed. There are no special disinfection requirements for documents (e.g., Power of Attorney, Paneling Papers, Advanced Care Directive), that have been in the patient's room:

- Perform hand hygiene
- Apply PPE
- Wipe the table on which the document is signed with a facility-approved cleaner/disinfectant before signing (refer to [specific disease protocol](#) for applicable disinfectant)
- Assist the patient to perform hand hygiene include wrist and any area that might contact the paper with alcohol-based hand rub before signing/touching the document
- Wipe the pen with a facility-approved disinfectant after signing (refer to [specific disease protocol](#) for applicable disinfectant)
- If a disposable folder is used, take it to the doorway where a second person can remove the paper. Discard folder in the room, remove gloves inside the patient room and perform hand hygiene on leaving the room
- Handle papers as per Routine Practice after removal from the room

10.3. Mobile Computers

- Place mobile computer outside of patient environment and maintain the computer as clean (i.e., change gloves and clean hands between care of the patient and use of the computer)
- Avoid cross contamination from computer to patient and patient to computer
- Alternately, a plastic cover may be placed on the computer keyboard. Remove the plastic cover and clean the keyboard, keyboard tray and mouse with facility-approved disinfectant (refer to [specific disease protocol](#) for applicable disinfectant) before removing from the room or upon patient discharge if dedicated to the room

11. Cleaning

- Clean and disinfect all horizontal and frequently touched surfaces daily, and immediately when soiled
- Site Infection Control Professional or designate may provide direction regarding more extensive and frequent cleaning, and the required facility-approved disinfectant depending on the specific organism being suspected or confirmed
- Keep all surfaces wet with facility-approved disinfectant for required contact time
- The Outbreak Management Team may recommend more extensive and frequent cleaning during an outbreak

- Discharge:
 - Follow Regional/Facility Standard Operating Procedure, Cleaning of Isolation Discharge Client Room/Cleaning of Occupied Client Isolation Room when:
 - Containment Precautions are discontinued or
 - the patient is moved
 - isolation room discharge cleaning includes:
 - Cleaning the room
 - Cleaning bathroom,
 - Changing the privacy curtains
 - Cleaning or changing the call bell and its string/cloth
 - Cleaning or changing the light cord
 - Leave the [Containment Precautions sign](#) on the door until terminal cleaning is completed

12. Patient and Visitor Education

Inform visitors about Containment Precautions and provide instruction on how to enter and exit the room safely, including:

- Information regarding how germs are spread
- When and [how to perform hand hygiene](#) according to the [4 moments of hand hygiene](#)
- Put on a gown and gloves before entering the patient room or bed space
- How to [put on, take off and dispose of PPE](#)

In the pediatric setting

- PPE may not be necessary for parents or caregivers exposed pre-hospital who are providing the usual care of the patient, provided the parent or caregiver is not visiting other patients

13. Visitor Management

Inform visitors to see the nurse before entering the room to:

- Provide instruction and [educational resources on hand hygiene](#) and [PPE](#).

Visitors:

- Perform hand hygiene on entering and exiting the room
- Are instructed to wear gowns and gloves when entering the room, and to remove when leaving
- Assess the risk to the health of the visitor, the risk of the visitor transmitting infection, and the ability of the visitor to comply with precautions;
- Keep the number of visitors to a minimum as determined by a risk benefit analysis
- Only close family members and those providing care, including essential emotional support as specified by the patient or alternate decision maker should be allowed
- Restrict visitors to visiting only one patient
- If the visitor must visit more than one patient, instruct the visitor to perform hand hygiene before going to the next patient room; and to follow [Routine Practices](#) and Containment Precautions

14. Duration of Precautions

Discontinue Containment Precautions:

- As indicated in the [Microorganism, Infectious Disease Table](#) if the specific organism or infectious disease is suspected or known
- Empirically for patients with symptoms listed in the [Clinical Presentation and Empiric Precautions Table](#)
- Or as directed by the WRHA IP&C Program

15. Occupational Health

Contact Occupational and Environmental Safety and Health (OESH) for staff assessment and or concerns.

16. References

- 16.1 [Annex A: Screening, Testing and Surveillance for Antibiotic-Resistant Organisms \(AROs\) In All Health Care Settings](#). (2013, February). Provincial Infectious Diseases Advisory Committee (PIDAC). Accessed December 12, 2018.
- 16.2 [Guidelines for the Prevention and Control of Antimicrobial-Resistant Organisms](#). (2016, August). MB Health. Accessed December 12, 2018.
- 16.3 [Managing Transmission of Carbapenem-Resistant Enterobacteriaceae in Healthcare Settings: A View From the Trenches](#). (2013, August). Palmore, Tara N. and Henderson, David K. Accessed December 12, 2018.
- 16.4 [Non-Employee Handbook](#). (2016). KentuckyOne Health. University of Louisville Hospital & James Graham Brown Hospital. Accessed December 12, 2018.
- 16.5 [Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care](#). (April 2012). Manitoba Health. Accessed December 12, 2018.

Protocol Contact:

Janice Briggs, RN, BA, MScN, CIC, Infection Prevention & Control Specialist,
WRHA Infection Prevention & Control

DROPLET PRECAUTIONS PROTOCOL

1. Introduction

Droplet Precautions are required for people diagnosed with, or suspected of having infectious germs (microorganisms) spread by the droplet route. Droplets are solid or liquid particles suspended in the air whose spread is usually limited to two metres (or six feet) mostly due to gravity; particle size is greater than 10 micrometres. Droplets are usually generated by a person coughing, sneezing or talking. ^[6.1]

Droplet Precautions are followed in addition to Routine Practices. Routine Practices shall be followed at all times by all healthcare workers.

2. Indications

Implement Droplet Precautions as indicated in the ***Clinical Presentation and Empiric Precautions Table*** for your sector. **Do not wait for the cause to be determined.** ^[6.1]

If the specific organism or infectious disease has been established, follow the measures outlined for your sector in the ***Microorganism Infectious Disease/Management of Infectious Diseases Table***.

The need to start Droplet Precautions may differ between some children (e.g. epiglottitis or cellulitis in child <5 yrs. old) and adults.

Some conditions and germs require two types of precautions (e.g. Droplet and Contact).

Droplet Precautions in addition to Routine Practices are sufficient for AEROSOL GENERATING MEDICAL PROCEDURES (AGMPs) performed on persons needing Droplet Precautions who **HAVE NO SIGNS AND SYMPTOMS OF:**

- Suspected or confirmed tuberculosis
- Severe acute respiratory syndrome
- Respiratory infection with an emerging pathogen where mode of transmission is not yet known.

3. Infection Prevention Measures

ELEMENT		ACUTE CARE	LONG TERM CARE	COMMUNITY
3.1	Hand Hygiene	Clean your hands according to the 4 Moments of Hand Hygiene: Moment 1: BEFORE initial patient/resident/client (PRC) or PRC environment contact Moment 2: BEFORE aseptic/clean procedure Moment 3: AFTER body fluid exposure risk Moment 4: AFTER PRC/PRC environment contact. Health care workers should avoid touching the mucous membranes of their eyes, nose and mouth with their hands to prevent self-contamination. ^[6.1] Refer to Routine Practices.		
3.2	Personal Protective Equipment	PPE for Droplet Precautions includes masks (procedure or surgical), eye protection (safety glasses or face shields), or masks with visor attachment. Store and put on PPE outside the person's room, bed space or when available, the anteroom. Masks <ul style="list-style-type: none"> Wear a procedure or surgical mask when within two metres of a coughing person, or if performing procedures that may result in the person coughing Mumps and Rubella: <ul style="list-style-type: none"> If you are immune to <i>rubella</i> or <i>mumps</i> you do not have to wear a mask. People who are not immune or immunity is unknown ^[6.1] must wear a mask and only enter the room when absolutely necessary Ensure nose, mouth and chin are covered when wearing a mask Do not dangle a mask around the neck when not in use Do not reuse mask Change the mask if it becomes wet or soiled (from the wearer's breathing or due to an external splash) Change the mask if breathing becomes difficult. Eye Protection <ul style="list-style-type: none"> Wear a mask with a visor attachment, safety glasses or face shield when within two metres of a coughing person, and for procedures that may result in coughing, splashes or sprays Wear eye protection over prescription or fashion glasses as these glasses are not adequate eye protection Wear disposable eye protection only once to avoid self-contamination Avoid self-contamination by not touching mask & eye protection on its external surface during use & disposal If reusable, clean and disinfect as per site policy. Masks and Eye Protection <ul style="list-style-type: none"> Remove carefully by the straps or ties Place into a garbage after leaving the person's room or bed space and perform hand hygiene Do not place on head or around the neck for later use Note: Faith or cultural head coverings do not need to be covered or removed.		

5.5.2

ELEMENT		ACUTE CARE	LONG TERM CARE	COMMUNITY
3.3	Source Control			
	3.3.1 Signage	Place a Droplet Precautions sign on the door/bed space.	Place a Droplet Precautions sign on the door/bed space.	N/A
	3.3.2 Respiratory Hygiene	Instruct people to follow respiratory hygiene: <ul style="list-style-type: none"> • Cover the mouth and nose against a sleeve or shoulder while coughing or sneezing • Use tissues to contain respiratory mucus or saliva by covering the mouth & nose while coughing or sneezing • Throw used tissue into a garbage as soon as possible • Turn the head away from others when coughing or sneezing • Offer the person who is coughing a mask if they are not performing respiratory hygiene properly • Place person receiving care in a single room, or pull privacy curtain in a multi-bed room/treatment area • Wear a procedure or surgical mask when coughing or sneezing. The mask may be removed when the person receiving care is in their own room • Direct people with a sudden onset of respiratory symptoms to a separate waiting area. 		
3.4	Accommodation	Single Room (preferred) <ul style="list-style-type: none"> • A single room with a private toilet (or designated commode chair), designated person's sink and staff hand washing sink is preferred • No special air handling and ventilation are necessary • Door may remain open • When single rooms are limited, assess risk to determine if people with the same germ can share a room (cohorting). Give single rooms to people who cannot be confined to their bed or bed space^[6.1] • When cohorting is not possible: • Consult ICP • Do not place a person on Droplet Precautions in the same room as a person who is at high risk for complications if infection occurs, or 	Single Room (preferred) <ul style="list-style-type: none"> • A single room with a private toilet (or designated commode chair), designated person's sink and staff hand washing sink is preferred • No special air handling and ventilation are needed • Door may remain open • When single rooms are limited, assess risk to determine if people with the same germ can share a room (cohorting). Give single rooms to people who cannot be confined to their bed or bed space. ^[6.1] When cohorting is not possible <ul style="list-style-type: none"> • Consult ICP/designate • Do not place a person on Droplet 	In the Clinic Setting <ul style="list-style-type: none"> • Place the person receiving care in a single room especially if you know or suspect they have a meningococcal infection, rubella, mumps or pertussis • If this is not possible: <ul style="list-style-type: none"> ○ Place the person in an area of the waiting room separated by at least two meters from other people OR ○ The person must wear a mask, then place them at least one meter from

ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY
	<p>with conditions/presentations that may increase spread (e.g., elderly, people with heart or lung disease, immunocompromised)</p> <ul style="list-style-type: none"> • Ensure there is at least two metres separation between bed spaces • Close privacy curtains between beds to decrease the chance for droplet spread • Inform roommates and all visitors of precautions • Consider the ability of the roommates and their visitors to follow Droplet Precautions when choosing a roommate ^[6.1] • When caring for a group of persons infected with the same germ (cohorting), Droplet Precautions must be applied individually for each person receiving care within the group. ^[6.1] <p>Newborn nurseries ^[6.1] A single room is not necessary, if there is at least two metres separation between infant stations, and visitors are able to follow Droplet Precautions.</p>	<p>Precautions in the same room as a person who is at high risk for complications if infection occurs, or with conditions/ presentations that may increase spread (e.g., people with heart or lung disease, immunocompromised)</p> <ul style="list-style-type: none"> • Ensure there is at least two metres separation between bed spaces • Close privacy curtains, if existing, between beds to decrease the chance for droplet spread • Inform roommates and all visitors of precautions <p>Consider the ability of the roommates and their visitors to follow Droplet Precautions when choosing a roommate. ^[6.1] When caring for a group of persons infected with the same germ (cohorting), Droplet Precautions must be applied individually for each person receiving care within the group. ^[6.1]</p>	<p>others in the waiting room</p> <ul style="list-style-type: none"> ○ Don't let the person stay in the waiting room too long • Think about making separate waiting areas for well child visits and children with respiratory symptoms, especially during times when there is more respiratory illnesses in the community (e.g.: influenza or RSV season). <p>In the Home Setting</p> <ul style="list-style-type: none"> • Discuss feasibility of spatial separation with person receiving care (e.g.: when sharing a bed)

ELEMENT		ACUTE CARE	LONG TERM CARE	COMMUNITY
3.5	Transport	Transport person out of the room for medically essential purposes only.		
	3.5.1 Internal Transfer	<p>If room transfer is unavoidable, advise transport and the receiving unit of precautions in advance.</p> <p>Precautions for person receiving care:</p> <ul style="list-style-type: none"> • Use a clean stretcher or wheelchair • Perform hand hygiene when leaving room (may need help) • Wear a procedure or surgical mask and follow respiratory hygiene during transport if able. <p>Precautions for staff</p> <ul style="list-style-type: none"> • Follow Droplet Precautions to enter the room • Perform hand hygiene before contact with the person, after taking off PPE and before leaving the room • Assist person to wear a mask. <p>If person is unable to wear mask staff will:</p> <ul style="list-style-type: none"> • Remove mask and eye protection on exit from room • Put on a clean mask and eye protection outside person's room • Avoid common areas • Transport person in the elevator with only the HCW. <p>If person is able to wear a mask staff can:</p> <ul style="list-style-type: none"> • Remove their mask and eye protection. 		<p>Ensure all medically necessary care is provided.</p> <p>In the Clinic Setting</p> <ul style="list-style-type: none"> • If person requiring Droplet Precautions must go to another area (e.g.: lab) in the facility, advise the area that Droplet Precautions are required and ask the person to wear a mask until outside of the facility <p>In the Home Setting</p> <ul style="list-style-type: none"> • Defer care (e.g.: foot care) and services (e.g. interactions with volunteers) that are not medically necessary when a person receiving care is experiencing acute respiratory symptoms.
	3.5.2 Inter-Facility Transport	<p>Let transport service and receiving facility know Droplet Precautions are needed. Document Droplet Precautions on transfer/referral form.</p> <p><u>Precautions for Transport Service/EMS:</u></p> <ul style="list-style-type: none"> • See section "Precautions for staff" • Follow Droplet Precautions at the receiving facility • Person receiving care can remove mask once in a suitable room (see section 3.4 Accommodation). 		

ELEMENT		ACUTE CARE	LONG TERM CARE	COMMUNITY
3.6	Therapy	<p>Based on their care plan the person can leave their room as needed for therapy. Supervise the person if they are not able to follow precautions.</p> <p>Before the person leaves the room, ensure the person: ^[6.1]</p> <ul style="list-style-type: none"> • Perform hand hygiene, (help as needed) • Wear a procedure or surgical mask if able • Teach person about respiratory hygiene practices (see section 3.3.2). <p>When the person is out of the room:</p> <ul style="list-style-type: none"> • The person should follow respiratory hygiene practices • If the person is coughing and unable to follow respiratory hygiene practices, staff that provide care within two metres of the person are to wear mask and eye protection. 		<p>Ensure all medically necessary care is provided.</p> <p>In the Clinic Setting</p> <ul style="list-style-type: none"> • If possible advise the person to reschedule when symptoms have resolved. ^[6.1] <p>In the Home Setting</p> <ul style="list-style-type: none"> • Defer care (e.g.: foot Care) and services (e.g.: interactions with volunteers) that are not medically necessary when persons receiving care are experiencing acute respiratory symptoms • Advise the person to exclude themselves from group programs when experiencing acute symptoms of a respiratory illness.
3.7	Management of the Healthcare Environment	Follow Routine Practices		
	3.7.1 Cleaning	<ul style="list-style-type: none"> • When precautions are discontinued or the person is discharged/transferred complete a terminal cleaning of the room or bed space and bathroom as per your facility standard operating procedure • Leave Droplet Precautions sign on door until discharge cleaning completed • During cleaning: <ul style="list-style-type: none"> ○ Change privacy curtains if present ○ Clean wipeable privacy screens if used ○ Clean or change any string/cloth call bells and/or light cords. 		<p>In the Clinic Setting</p> <ul style="list-style-type: none"> • Clean clinic room as usual between appointments with a healthcare approved disinfectant. <p>In the Home Setting</p> <ul style="list-style-type: none"> • Maintain routine household cleaning.

ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY
3.8 Education	Inform the person receiving care and/or visitors as appropriate about Droplet Precautions, including: <ul style="list-style-type: none"> • How the germ is spread • When and how to clean their hands according to the 4 moments of hand hygiene • How to put on, take off and dispose of PPE. • Duration of precautions (see section 4 below) • Refer to: <ul style="list-style-type: none"> ◦ Droplet Precautions fact sheet; Respiratory Etiquette pamphlet; Cover Your Cough poster 		
<p><i><u>In the adult setting</u></i></p> <ul style="list-style-type: none"> • Visitors must clean their hands when entering and exiting the room • Visitors must wear a mask and eye protection when giving direct care to a coughing person (e.g. when helping with bathing, dressing, toileting, feeding or changing soiled items) • Visitors need to have access to the same PPE as healthcare workers. <p><i><u>In the pediatric setting</u></i></p> <p>PPE may not be necessary for parents or caregivers exposed pre-hospital who are providing the usual care of the person, provided the parent or caregiver is not visiting other people.</p>		<p>In the Clinic Setting</p> <ul style="list-style-type: none"> • PPE may not be necessary for exposed parents, household members or caregivers who are providing the usual care of the person. [6.1] <p>In the Home Setting</p> <ul style="list-style-type: none"> • Instruct the person receiving Home Care to self-screen for acute respiratory illness and inform the Home Care agency prior to the health care worker visit, scheduled appointment or attendance at a group program. [6.1] 	

ELEMENT	ACUTE CARE	LONG TERM CARE	COMMUNITY
3.9 Visitor Management	<p>As directed on the Droplet Precautions sign, visitors are to report to the nursing station before entering the room. ^[6.1]</p> <ul style="list-style-type: none"> • Provide instruction on cleaning hands and PPE. • Exceptions: While visiting people with suspected or confirmed H. influenzae type b infection: <ul style="list-style-type: none"> ○ Visitors need to wear a mask and eye protection if they will then have extensive close contact with non-immune infants or children less than 5 years old after the visit. ^[6.1] • While visiting people with suspected or confirmed rubella or mumps: <ul style="list-style-type: none"> ○ If you are immune to <i>rubella</i> or <i>mumps</i> you do not have to wear a mask ○ People who are not immune or immunity is unknown ^[6.1] must wear a mask & eye protection & only enter the room when absolutely necessary • Assess the risk to the health of the visitor, the risk of the visitor to spread infection, and the ability of the visitor to follow precautions • Keep the number of visitors to a minimum • Visitor should be asked not to visit other people after visiting a person on Droplet Precautions • If the visitor must visit more than one person, inform the visitor to use the same PPE as health care workers. Clean hands and put on appropriate PPE needed before going to the next person's room. 		<p>There are no special considerations for visitors in any community health setting.</p>

4. Duration of Precautions

Discontinue Droplet Precautions when the person can no longer spread germs, and terminal cleaning of the room or bed space is complete. See applicable disease in your sector's [Clinical Presentation and Empiric Precautions Table](#), or the [Microorganism, Infectious Disease Table](#).

Determine duration of precautions on a case-by-case basis when symptoms are prolonged or when the person is immune suppressed. Re-evaluate for other potential diagnoses if symptoms persistent. Repeat microbiological testing if warranted. ^[6.1]

5. Occupational Health

Contact Occupational & Environmental Safety & Health (OESH)/Occupational Health designate for staff assessment &/or concerns.

6. References

- 6.1. [Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care](#). (June 2019). Manitoba Health. Accessed November 21, 2019.

PROTECTIVE PRECAUTIONS PROTOCOL

1. Introduction

Protective Precautions protect severely immunocompromised people from environmental organisms and organisms carried by staff, visitors and even their own flora. Follow Protective Precautions in addition to [Routine Practices](#). Follow [Routine Practices](#) at all times.

2. Indications

Implement Protective Precautions for severely [immunocompromised](#) people:

- who have had an allogeneic hematopoietic stem cell transplant
- OR

- whose absolute neutrophil count (ANC) is expected to be below $0.5 \times 10^9/L$ ^[18.5] for 7 days or more.

Note: The ANC is in the CBC report under Abs Neutrophils.

The ANC is calculated automatically and is written as # X 10E9/L.

3. Source Control

- Put the [Protective Precautions sign](#) in a visible location
- Dedicate wash basins to a single person
- Clean and disinfect wash basins with disinfectant wipes between each use on same person
- If bathed in a tub, clean tub according to facility procedures before each use
- Consider using disposable bath wipes for bathing
- Consider bathing more often than standard.

4. Accommodation

- Put person on Precautions in a **positive** pressure room where available
- Put person on Precautions in a single room if a **positive** pressure room is not available
- Do not cohort
- Keep door closed
- Avoid room transfer unless medically indicated.

5. Duration of Precautions

- Discontinue Protective Precautions on a case by case basis ONLY with direction from the attending physician, Infectious Diseases or site Infection Control Professional (ICP)/designate.

6. Staff Management

Staff with the following SHALL NOT enter the room:

- signs or symptoms of infectious diseases, example:
 - fever
 - respiratory symptoms
 - vomiting
 - diarrhea
 - herpes zoster/shingles or other infectious rashes, whether covered or not
 - open herpes simplex virus lesions of lips or fingers that are not dry and crusted over
- recent exposure to infectious diseases, e.g., chickenpox, measles, mumps, rubella, pertussis or an infectious rash
- rash within 6 weeks of chickenpox (varicella) vaccination ^{[18.4][18.10][18.9]}
- rash within 6 weeks of live-shingles (Zostavax) vaccination ^{[18.7][18.11][18.9]} live oral polio vaccination (only available outside of Canada & the US) within 6 weeks. ^[18.6]

7. Hand Hygiene

- Staff shall perform meticulous hand hygiene:
 - before initially providing care or having contact with the care environment
 - before aseptic/clean procedures
 - before putting on gloves
 - after body fluid exposure risk
 - after providing care or having contact with the care environment
 - after taking off gloves
- Encourage hand hygiene before eating and taking medications ^[18.8]
- Refer to Routine Practices: [Hand Hygiene](#) for additional information.

8. Personal Protective Equipment (PPE)

- staff and visitors do NOT routinely wear PPE to enter the room.
- staff and visitors use [PPE](#) according to Routine Practices and as indicated for suspected or known infections or procedures for which PPE is needed. See [Point of Care Risk Assessment \(PCRA\)](#)
- Faith or cultural head coverings do not need to be covered or removed in Protective Precautions rooms.

9. Transport

- Transport or leave room only after a risk-benefit analysis
- **Before the transport**, notify the receiving department or facility and Transport Services that Protective Precautions are needed
- Avoid:
 - dusty areas
 - construction sites. See [IP&C for Construction, Renovation & Maintenance](#)
 - areas with floor burnishers in use
 - areas with vacuums in use.

9.1. Person being transported

- wears N95 respirator or procedure or surgical mask when outside of their room if directed by attending physician
- does NOT wear gloves or an isolation gown.

9.2. Staff and Visitors

- Staff and visitors do NOT routinely wear any PPE during transport
- Visitors with infectious diseases follow measures in [Section 14: Visitor Management](#).

10. Therapy

- Person in care to leave their room only after a risk-benefit analysis, including for therapy
- Clean and disinfect equipment with facility-approved disinfectant **before** use with the person on Precautions.

11. Equipment and Environment

- Dedicate equipment to the person on Protective Precautions when possible
- Clean and disinfect equipment with facility-approved disinfectant before dedicating it
- If equipment cannot be dedicated, clean and disinfect it with facility-approved disinfectant before use with the person on Precautions
- Use disposable supplies when possible
- Do not share straight blade [razors](#) or shared reusable razor heads
- No fresh cut flowers, potted plants, artificial plants or unglazed clay items.
- No fans, dehumidifiers and diffusers. ^[18.2]

12. Health Record, Documents and Mobile computers

- Clean and disinfect chart covers and equipment with facility-approved disinfectant before it comes into the Protective Precautions room
 - Refer to [Cleaning Work Station on Wheels](#) Standard Work Sheet where applicable
- Use [Routine Practices](#) for items you remove from a Protective Precautions room.

13. Cleaning

- Follow Regional/Facility Standard Operating Procedures for regular Discharge Cleaning
- No additional cleaning is required when Protective Precautions are discontinued.

14. Education

Teach the person on Precautions and their visitors about:

- Hand hygiene. Use resources such as:
 - [Hand Hygiene Pamphlet](#), [Hand Hygiene Procedures - Hand Rub](#)
 - [Hand Hygiene Procedures - Hand Wash](#)
- Areas to avoid, such as dusty areas ^[18.3] construction sites ^[18.3] and areas with vacuums or floor burnishers in use. See [IP&C for Construction, Renovation & Maintenance](#).

15. Visitors

Screen visitors of all ages for:

- signs and symptoms of infectious disease
- infectious disease exposure history

Visitors with the following SHALL NOT enter the room:

- signs or symptoms of infectious diseases e.g.:
 - fever
 - respiratory symptoms
 - vomiting
 - diarrhea
 - herpes zoster/shingles or other infectious rashes, whether covered or not
 - open herpes simplex virus lesions of lips or fingers that are not dry and crusted over
- recent exposure to infectious diseases, e.g., chickenpox, measles, mumps, rubella, pertussis
- rash within 6 weeks of chickenpox (varicella) vaccination ^{[18.4][18.10][18.9]}
- rash within 6 weeks of live-shingles (Zostavax) vaccination ^{[18.7][18.11][18.9]}
- live oral polio vaccination (available outside of Canada & the US) within 6 weeks ^[18.6]
- Visitors who may have an infectious disease shall not visit. However, close family members and those providing care, including essential emotional support with infections may visit on a case-by-case basis ONLY FOR EXTREMELY EXTENUATING CIRCUMSTANCES such as end-of-life counseling, management planning, test result discussion, and after assessment by and approval of the unit Manager or designate. A Consult with Infectious Diseases is strongly recommended. Such visitors:
 - with diseases transmitted by airborne or droplet route, wear a procedure or surgical mask
 - with open lesions, cover lesions with bandages
 - with cold sores, cover cold sores with a procedure or surgical mask
 - must be informed of the importance of thorough hand hygiene.

16. Definitions

Immunocompromised: Person with congenital or acquired immunodeficiency or immunodeficiency due to therapeutic agents or hematologic malignancies. This includes but is not limited to:

- those who are undergoing immunosuppressive therapy
- individuals with leukemia or lymphoma or other malignant disease
- individuals on medications that suppress the immune system, such as high-dose systemic steroids or chemotherapeutic agents
- individuals with cellular immune-deficiencies or other immune system conditions ^[18.8]

17. Occupational and Environmental Safety and Health (OESH)

Contact Occupational and Environmental Safety and Health (OESH)/designate for staff assessment and/or concerns.

18. References

- 18.1. [2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings](#). (Updated 2017, October). The Healthcare Infection Control Practices Advisory Committee (HICPAC). Accessed September 5, 2019.
- 18.2. Airborne Nosocomial Microorganisms. Hospital Airborne Infection Control. Kowalski, W. CRC Press (2011). Chapter 4.
- 18.3. Canadian Healthcare Facilities, Standard Z8000.11, first edition. (2011). Canadian Standards Association (CSA).
- 18.4. [Contagiousness of Varicella in Vaccinated Cases: A Household Contact Study](#). Seward, J.F. et al. (2004, August). *JAMA* 2004; 292(6):704-8. Accessed September 5, 2019.
- 18.5. [Guidelines in the Management of Febrile Neutropenia for Clinical Practice](#). (2017, October). American Journal of Managed Care (AJMC). Accessed November 5, 2019.
- 18.6. [Poliovirus Epidemiology and Prevention of Vaccine-Preventable Diseases. The Pink Book: Course Textbook - 13th Edition](#), pg. 302. (2015, September). Centers for Disease Control and Prevention. Accessed September 5, 2019.
- 18.7. [Recombinant Zoster \(Shingles\) Vaccine, RZV](#). (2018, February 12). Centers for Disease Control and Prevention. Accessed September 5, 2019.
- 18.8. [Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care](#). (2019, June). Manitoba Health. Accessed November 5, 2019.
- 18.9. Varicella vaccine, rashes, and restricting healthcare workers, Infection Prevention and Control and Occupational and Environmental Safety and Health meeting. (2018, October 4). Dr. Allen Kraut, Dr. Eric Bow, Dr. John Embil. Expert opinion.
- 18.10. [Varivax Full Prescribing Information](#). (2019, January). Merck & Co. Inc. Whitehouse Station NJ 08889, USA. Accessed September 5, 2019.
- 18.11. [Zostavax Full Prescribing Information](#). (2018). Merck & Co. Inc. Whitehouse Station NJ 08889, USA. Accessed September 5, 2019.

MODIFIED PROTECTIVE PRECAUTIONS PROTOCOL

1. Introduction

Modified Protective Precautions protect moderately to severely immunocompromised people from environmental organisms and organisms carried by staff, visitors and even their own flora. Follow Modified Protective Precautions in addition to [Routine Practices](#). Follow [Routine Practices](#) at all times.

2. Indications

Implement Modified Protective Precautions for moderately to severely [immunocompromised](#) people:

- who have NOT had an allogeneic hematopoietic stem cell transplant **AND**
- whose Absolute Neutrophil Count (ANC) is NOT expected to be below 0.5 x 10E9/L for 7 days. [\[18.3\]](#)

Note: The ANC is in the CBC report under Abs Neutrophils.

The ANC is calculated automatically and is written as # X10E9/L.

3. Source Control

- Put the [Modified Protective Precautions sign](#) in a visible location.
- Dedicate wash basins to a single person.
- Clean and disinfect wash basins with disinfectant wipes between each use on same person.
- If bathed in a tub, clean tub according to facility procedures before each use.

4. Accommodation

- Put person on Precautions in a single room where available.
- Door may remain open.
- Avoid room transfer unless medically indicated.

4.1. Cohorting

- If a single room is not available, cohort with a suitable roommate
NOTE: A 'suitable roommate' does not have an infection and is not at high risk for infection. Roommate should not have:
 - fever
 - respiratory symptoms
 - vomiting
 - diarrhea
 - wounds
 - herpes zoster/shingles or other infectious rashes, whether covered or not
 - open herpes simplex virus lesions of lips or fingers that are not dry and crusted over.
 - recent exposure to infectious diseases, example., chickenpox, measles, mumps, rubella, pertussis or infectious rashes. [\[18.7, 18.8, 18.2\]](#)
 - rash within 6 weeks of chickenpox (varicella) vaccination. [\[18.7, 18.8, 18.2\]](#)
 - rash within 6 weeks of live-shingles (Zostavax) vaccination. [\[18.5, 18.8, 18.2\]](#)
 - live oral polio vaccination (available outside of Canada & the US) within 6 weeks. [\[18.5\]](#)
- Maintain a separation of 2 metres between other people in care.
- Close curtains between beds.

5. Duration of Precautions

- Discontinue Modified Protective Precautions on a case by case basis with direction from the attending physician, Infectious Diseases or site Infection Control Professional (ICP)/designate.

6. Staff Management

Staff with the following should NOT enter the room:

- signs or symptoms of infectious diseases, example:
 - fever
 - respiratory symptoms
 - vomiting
 - diarrhea
 - herpes zoster/shingles or other infectious rashes, whether covered or not
 - open herpes simplex virus lesions of lips or fingers that are not dry and crusted over.
- recent exposure to infectious diseases e.g., chickenpox, measles, mumps, rubella, pertussis or an infectious rash.
- rash within 6 weeks of chickenpox (varicella) vaccination. [\[18.7, 18.8, 18.2\]](#)
- rash within 6 weeks of live-shingles (Zostavax) vaccination. [\[18.5, 18.8, 18.2\]](#)
- live oral polio vaccination (available outside of Canada & the US) within 6 weeks [\[18.5\]](#) should NOT enter the room.
- Staff who may have an infectious disease should not be in contact with immunocompromised people in care. However, if no one else is available, staff with such infections may be permitted on a case-by-case basis ONLY FOR ESSENTIAL CARE and after assessment by and approval of the unit Manager or designate. Consultation with Infectious Diseases is strongly recommended. Such staff:
 - with diseases transmitted by the airborne or droplet route, wear a procedure or surgical mask.
 - with open lesions, cover lesions with bandages.
 - with cold sores, cover cold sores with a procedure or surgical mask.
 - must perform thorough hand hygiene.

7. Hand Hygiene

- Healthcare workers shall perform meticulous hand hygiene:
 - before initially providing care or having contact with the care environment
 - before aseptic/clean procedures.
 - before putting on gloves.
 - after body fluid exposure risk.
 - after providing care or having contact with the care environment.
 - after taking off gloves.
- Encourage hand hygiene before eating and taking medications [\[18.6\]](#)
- Refer to Routine Practices: [Hand Hygiene](#) for additional information.

8. Personal Protective Equipment (PPE)

- staff and visitors do NOT routinely require PPE to enter the room.
- staff and visitors use [PPE](#) according to Routine Practices and as indicated for suspected or known infections or procedures for which PPE is needed. See [Point of Care Risk Assessment \(PCRA\)](#)
- Faith or cultural head coverings do not need to be covered or removed in Modified Protective Precautions rooms.

9. Transport

- Transport or leave room only after a risk-benefit analysis.
- **Before the transport**, notify the receiving department or facility and Transport Services that Modified Protective Precautions are needed.
- Avoid:
 - dusty areas.
 - construction sites. See [IP&C for Construction, Renovation & Maintenance](#).
 - areas with floor burnishers in use.
 - areas with vacuums in use.

9.1. Person being transported

- wears N95 respirator or procedure or surgical mask when outside of their room if directed by attending physician.
- does NOT wear gloves or an isolation gown.

9.2. Staff and Visitors

- Staff and visitors do not wear any PPE during transport .
- staff with infectious diseases follow measures in [Section 5: Staff Management](#).
- Visitors with infectious diseases follow measures in [Section 14: Visitor Management](#).

10. Therapy

- Person in care may leave their room only after a risk-benefit analysis, including for therapy.
- Clean and disinfect equipment with facility-approved disinfectant **before** use with the person on Precautions.

11. Equipment and Environment

- Dedicate equipment to the person on Modified Protective Precautions when possible.
- Clean and disinfect equipment with facility-approved disinfectant before dedicating it.
- If equipment cannot be dedicated, clean and disinfect it with facility-approved disinfectant before use with the person on Precautions.
- Use disposable supplies when possible.
- Do not share straight blade [razors](#) or shared reusable razor heads.
- Use caution and consider risks and benefits of fresh cut flowers, potted plants, artificial plants or unglazed clay items.
- Use caution and consider risks and benefits of fans, dehumidifiers and diffusers.

12. Health Record, Documents and Mobile Computers

- Clean and disinfect chart covers and equipment with facility-approved disinfectant before it comes into the Modified Protective Precautions room.
 - Refer to [Cleaning Work Station on Wheels](#) Standard Work Sheet where applicable.
- Use [Routine Practices](#) for any items you remove from a Modified Protective Precautions room.

13. Cleaning

- Follow Regional/Facility Standard Operating Procedures for regular Discharge Cleaning.
- No additional cleaning is required when Modified Protective Precautions are discontinued.

14. Education

Teach the person on Precautions and their visitors about:

- Hand hygiene. Use resources such as:
 - [Hand Hygiene Pamphlet](#), [Hand Hygiene Procedures - Hand Rub](#)
 - [Hand Hygiene Procedures - Hand Wash](#).
- Areas to avoid such as:
 - Dusty areas ^[18.4]
 - Construction sites ^[18.4]. See [IP&C for Construction, Renovation & Maintenance](#).

15. Visitor Management

- Screen visitors of all ages for:
 - signs and symptoms of infectious disease
 - infectious disease exposure history.

Visitors with the following should NOT enter the room:

- signs or symptoms of infectious diseases example:
 - fever
 - respiratory symptoms
 - vomiting
 - diarrhea
 - herpes zoster/shingles or other infectious rashes, whether covered or not
 - open herpes simplex virus lesions of lips or fingers that are not dry and crusted over.
- recent exposure to infectious diseases, e.g., chickenpox, measles, mumps, rubella, pertussis.
- rash within 6 weeks of chickenpox (varicella) vaccination. [\[18.7, 18.8, 18.2\]](#)
- rash within 6 weeks of live-shingles (Zostavax) vaccination. [\[18.5, 18.8, 18.2\]](#) live [\[18.5\]](#)
- Visitors who may have an infectious disease should not visit. However, close family members and those providing care, including essential emotional support with such infections may be permitted on a case-by-case basis ONLY FOR EXTENUATING CIRCUMSTANCES (example, end-of-life counseling, management planning, test result discussion, emotionally vulnerable person) and after assessment by and approval of the unit Manager or designate. Consultation with Infectious Diseases is strongly recommended.

Such visitors:

- with diseases transmitted by airborne or droplet route, wear a procedure or surgical mask.
- with open lesions, cover lesions with bandages.
- with cold sores, cover cold sores with a procedure or surgical mask.
- must be informed of the importance of thorough hand hygiene.

16. Definitions

Immunocompromised: Person with congenital or acquired immunodeficiency or immunodeficiency due to therapeutic agents or hematologic malignancies. This includes but is not limited to:

- those who are undergoing immunosuppressive therapy.
- individuals with leukemia or lymphoma or other malignant disease.
- individuals on medications that suppress the immune system, such as high-dose systemic steroids or chemotherapeutic agents.
- individuals with cellular immune-deficiencies or other immune system conditions. [\[18.8\]](#)

17. Occupational and Environmental Safety and Health (OESH)

Contact Occupational & Environmental Safety & Health/designate for staff assessment &/or concerns.

18. References

- 18.1. [2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings](#). (Updated 2017, October). The Healthcare Infection Control Practices Advisory Committee (HICPAC). Retrieved September 5, 2019.
- 18.2. Dr. Allen Kraut, Dr. Eric Bow, Dr. John Embil. Varicella vaccine, rashes, and restricting healthcare workers, Infection Prevention and Control and Occupational and Environmental Safety and Health meeting. (2018, October 4). Expert opinion.
- 18.3. [Guidelines in the Management of Febrile Neutropenia for Clinical Practice](#). (2017, October). American Journal of Managed Care (AJMC). Retrieved September 5, 2019.
- 18.4. Infection Control During Construction, Renovation, and Maintenance of Health Care Facilities, CSA-Z317.13-07. (2007). Canadian Standards Association.
- 18.5. [Poliovirus Epidemiology and Prevention of Vaccine-Preventable Diseases. The Pink Book: Course Textbook - 13th Edition](#), pg. 302. (2015, September). Centers for Disease Control and Prevention. Retrieved September 5, 2019. (2019, June). Manitoba Health. Accessed September 5, 2019.
- 18.6. [Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care](#). (2019, June). Manitoba Health. Accessed November 8, 2019.
- 18.7. Seward, J.F. et al. (2004, August). [Contagiousness of Varicella in Vaccinated Cases: A Household Contact Study](#). JAMA 2004;292(6):704-8. Retrieved September 5, 2019.
- 18.8. [Varivax Full Prescribing Information](#). Merck & Co. Inc. Whitehouse Station NJ 08889, USA. Retrieved September 5, 2019.

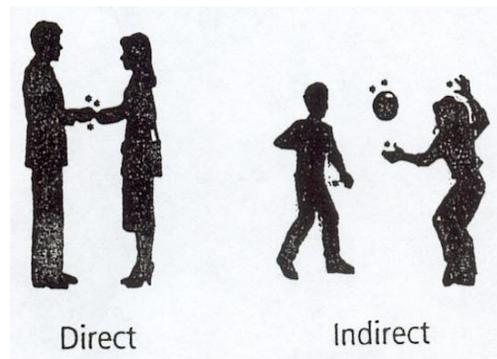
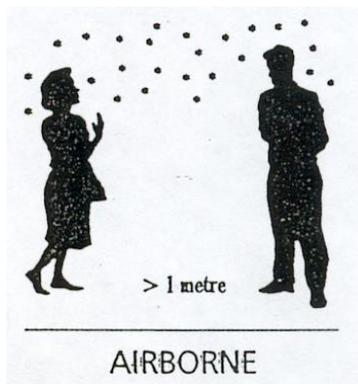


7. Airborne/Contact Precautions

7.1 Introduction

Airborne/Contact Precautions are required for patients diagnosed with, or suspected of having an infectious microorganism transmitted by the airborne and contact routes. Refer to 3.3 Airborne transmission for a description of airborne transmission and Direct contact transmission and Indirect contact transmission for descriptions of contact transmission.

Airborne/Contact Precautions are followed in addition to Routine Practices. Routine Practices shall be adhered to at all times by all healthcare workers.



7.2 Indications for Airborne/Contact Precautions

Airborne/Contact Precautions are implemented according to the Clinical Presentation/Microorganism/Infectious Disease Table. Refer to this table for specific disease/microorganism information. Refer to Implementation of Additional Precautions on page 5.1.

7.3 Accommodation

Single room with negative pressure ventilation in relation to surrounding areas

NOTE: When a negative pressure isolation room is not available, or in the event of an outbreak or exposure where large numbers of patients require Airborne Precautions, consult Infection Prevention and Control before patient placement to determine room placement and/or cohorting of patients.



- The door shall remain closed whether or not the patient is in the room
 - The door shall remain closed for one following the discontinuation of airborne precautions

- The patient shall be confined to the room
 -
 - When exiting the room for medically essential purposes, the patient shall wear a surgical/procedure mask
 - The patient shall perform hand hygiene after removal of the mask
 - When there are exceptional circumstances, the patient may leave the room in consultation with Infection Prevention and Control

Rooms should have dedicated toilet, hand hygiene, and bathing facilities.

For Varicella, facilities without negative pressure rooms and where transfer is not feasible, maintain patient in a single room with the door closed. These patients should be placed on wards where there are no susceptible, immunocompromised patients.

If numbers of negative pressure rooms are limited, set priority for use according to the impact of potential airborne transmission (e.g., infectious tuberculosis > measles > varicella > disseminated zoster > extensive localized zoster).

7.4 Healthcare Workers

Healthcare workers should be aware of their immunity status

- Non-immune healthcare workers should not care for patients with vaccine-preventable airborne diseases (e.g. chickenpox, smallpox), unless absolutely necessary. If it is absolutely necessary to care for one of these patients then they must wear a N95 respirator to enter the isolation room.

7.5 Hand Hygiene

Healthcare workers shall remove gloves and gown and perform hand hygiene before leaving the isolation room. After hand hygiene, take care not to contaminate hands before leaving the room.

Healthcare workers shall perform hand hygiene after removal of their N95 respirator.

Refer to Removing Personal Protective Equipment in Appendices 6 and 7.



7.6 Personal Protective Equipment

Masks/Respirators

Special masks/ respirators: N95 respirators* shall be available for persons entering the isolation room.

Individuals who are immune to vaccine-preventable diseases (e.g. chickenpox, smallpox) do not need to wear N95 respirators to go into the isolation room. This should be documented in the Additional Instructions section of the Airborne/Contact Precautions sign.

Individuals who are not immune or are uncertain of their immunity shall not enter the room unless absolutely necessary. If it is absolutely necessary to enter the room, then they shall wear a N95 respirator.

N95 respirators shall be

- Fit-tested for healthcare workers, as directed by Occupational Health
- Seal checked by healthcare workers prior to each use. Seal checking procedure is as follows:
 - Cover respirator with both hands
 - Perform one of the following:
 - Inhalation Test: If respirator collapses slightly there is an adequate seal
 - Exhalation Test: If no air escapes respirator, there is an adequate seal
- Worn once
 - Changed
 - When wet
 - If the front of the N95 respirator has been touched, and/or
 - When contaminated with patient secretions
 - Removed in a manner preventing contamination. Refer to Removal of Personal Protective Equipment in Appendices 6 and 7
 - Removed after exit of the isolation room/cubicle

N95 respirators shall never dangle around the neck

*N95 respirators shall be certified by the National Institute of Occupational Safety and Health (NIOSH) with an N95 efficiency rating or better



Gloves

- Are worn when entering the room or patient's designated bed space in shared room
- Are removed before leaving the room or the patient's dedicated bed space

Gowns

- Are worn if clothing or forearms will have direct contact with the patient
- Are worn if it is anticipated clothing or forearms will be in direct contact with frequently touched environmental surfaces or objects and there is an increased risk of the environment being contaminated (e.g., incontinent patient, diarrhea, or drainage from a wound, colostomy or ileostomy not contained by dressing)

Remove gown before leaving the room.

7.7 Patient Transport

Patient transport out of the room is for medically essential purposes only.

In advance of the procedure, notify the Patient Transport Services and the receiving department regarding the need for Airborne/Contact Precautions.

Maintain Airborne/Contact Precautions while the patient is outside the isolation room

- Before use, cover the clean transport chair or stretcher with a cover sheet
- Healthcare workers wear N95 respirators when transporting patients
- Clean gown and gloves for healthcare worker for transport. Take care not to contaminate the environment with soiled gloves
- The patient wears a surgical/procedure mask and performs hand hygiene prior to leaving the room
- The patient with skin lesions associated with varicella or smallpox shall have them securely covered
- After use, clean and disinfect the transport chair/stretcher in the room
- Remove gown and gloves and perform hand hygiene before leaving the room
- Consult Respiratory Therapy if the patient (adult and small child) has an artificial airway (e.g., ETT) and transport according to these guidelines



- **Oral/nasal pharyngeal airway:** Patient wears a surgical/procedure mask over their mouth and nose
- **Oral/nasal pharyngeal airway manually ventilated:** N100 filter or N100 filter/Heat Moisture Exchanger (HME) between the resuscitation bag and the patient or a N100 filter on the exhalation port of the resuscitation bag
- **Oral/nasal endotracheal tube:** N100filter/HME on the ETT*
- **Tracheostomy Tube:** N100 filter/HME on the tracheostomy tube*
- Consult Respiratory Therapy for guidance regarding the transport of infants in incubators
- The patient performs hand hygiene after removal of the surgical/procedure mask

* If air leak present, loosely cover the mouth or nose, around the tube with a facecloth or similar cloth. Cloths used to cover the site of the leak shall be considered contaminated.

7.8 Equipment and Environment

Patient-care equipment (e.g., thermometers, blood pressure cuffs, lifts/slings) should be dedicated to the use of the patient and cleaned and disinfected before reuse with another patient.

Disposable patient care equipment and supplies shall be discarded.

Toys and personal effects should not be shared with other patients.

The patient record and other papers shall not be taken into the room. If the patient record is required to accompany the patient for tests or treatment it shall be placed in a protective cover to prevent contamination.

If personal documents are required to be taken into the room

- Wipe the table the document is to be signed on with facility- approved disinfectant
- The patient shall perform hand hygiene
- Patient should have a dedicated pen in the room. If not, after signing, wipe the pen with facility- approved disinfectant

All horizontal and frequently touched surfaces shall be cleaned daily and immediately when soiled.

Special cleaning procedures may be required in an outbreak situation. This will be determined in consultation with Infection Prevention and Control.



7.9 Patient/Family

The patient, and/or family should be educated about the nature of the patient's infectious disease, the precautions to adhere to, and the length of time precautions will be in place. Refer to the 'Patient/Family Information Sheet on Airborne/Contact Precautions' in Appendices 12.2 and 13.

Instruct the patient/family regarding Respiratory Hygiene/Cough Etiquette

- When coughing or sneezing, cover his/her nose and mouth with a tissue, or cough into his/her shoulder
- Immediately dispose of the tissue in the appropriate waste receptacle, and
- Perform hand hygiene

Refer to the Cover Your Cough Pamphlet in Appendix 9.

Instruct the patient about the appropriate use and management of PPE

- How to correctly apply and wear a surgical/procedure mask
- How to remove the surgical/procedure mask without contaminating oneself
- Know the procedure and the importance of hand hygiene prior to leaving the room and following removal of the surgical/procedure mask

The family shall be instructed about the appropriate use and management of PPE

- If required, instruct the family about assisting with application of the surgical/procedure mask for the patient
- Instruct the family about how to correctly apply a N95 respirator, including seal check

Instruct the patient and family on preventing transmission of the infectious disease to his/her family, and friends during his/her hospital stay and upon his/her return to the community

Instruct the patient, family about the procedure and importance of performing hand hygiene

7.10 Visitors

Visitors shall be informed about the precautions to adhere to.

Instruct the visitors about the procedure and importance of performing hand hygiene.



If susceptible to the airborne microorganism requiring Airborne/Contact Precautions, visitors should not visit unless there are exceptional circumstances. If this is the case, consult Infection Prevention and Control prior to the visit.

The nurse shall talk with visitors before they enter the isolation room, and

- Assess risk to the health of the visitor and the risk of the visitor transmitting infection
- Shall instruct the visitor about the appropriate use of respirators
- If indicated, instruct the visitor about the appropriate use of gowns, gloves and other precautions

Keep the number of visitors to a minimum (at the discretion of the unit staff).

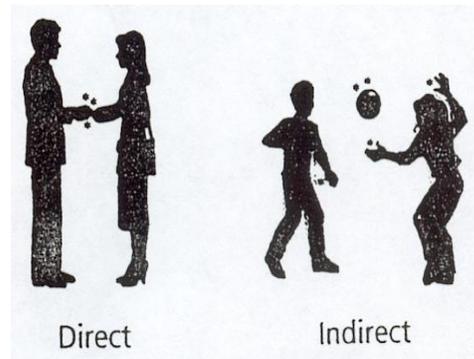
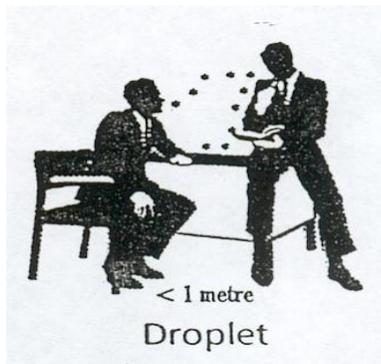


8. Droplet/Contact Precautions

8.1 Introduction

Droplet/Contact Precautions are required for patients diagnosed with, or suspected of having infectious microorganisms transmitted by the droplet route and contact routes. Refer to 3.3, Droplet transmission for a description of droplet transmission, Direct contact transmission and Indirect contact transmission for descriptions of contact transmission.

Droplet/Contact Precautions are followed in addition to Routine Practices. Routine Practices shall be adhered to at all times by all healthcare workers.



8.2 Indications for Droplet/Contact Precautions

Droplet/Contact Precautions are implemented according to the Clinical Presentation/Microorganism/Infectious Disease Table. Refer to this table for specific disease/microorganism information. Refer to Implementation of Additional Precautions on page 5.1.

8.3 Accommodation

Patients shall preferably be placed in a single room. No special air handling and ventilation are necessary

- The door may remain open
- Room should have dedicated toilet, hand hygiene, and bathing facilities



In instances where there are not a sufficient number of single rooms, cohort patients with the same microorganism together. This shall be done in consultation with Infection Prevention and Control.

If a single room is not available and cohorting is not possible consult Infection Prevention and Control

- Maintain a separation of at least one metre between patients
- Roommates and all visitors shall be aware of precautions to follow
 - Select roommates for their ability, and that of their visitors, to comply with Droplet/Contact Precautions
 - Roommates should not be at high risk for acquiring an infection (e.g., chronic lung disease, severe congenital heart disease, immunodeficiency)

For newborn nurseries, a single room is not necessary if there is a 1-2 metre separation between infant stations

8.4 Hand Hygiene

Healthcare workers shall remove gloves and gown and perform hand hygiene before leaving the room/cubicle. After hand hygiene take care not to contaminate hands before leaving the room.

Healthcare workers shall perform hand hygiene after removal of the surgical/procedure mask.

Refer to Removing Personal Protective Equipment in Appendices 6 and 7.

8.5 Personal Protective Equipment

Masks

A surgical/procedure mask shall be worn by all healthcare workers when within one metre of patient, and for procedures that may result in coughing, splashing, and aerosol production

- For care of patients with Rubella, immune persons do not need to mask. Non-immune persons shall enter the room only if absolutely necessary and shall wear a surgical/procedure mask



Masks shall be

- Worn once
 - Changed
 - When wet
 - If the front of the mask has been touched, and/or
 - When contaminated with patient secretions
 - Removed in a manner preventing contamination. Refer to Removal of Personal Protective Equipment in Appendices 6 and 7
 - Removed after exit of the isolation room/cubicle

Masks shall never dangle around the neck.

Eye Protection

Goggles, glasses, or face shields are worn when within one metre of a coughing patient with symptoms of respiratory infection and for procedures that may result in coughing, splatter, and/or aerosols

- Goggles, glasses or face shields shall be removed in a manner preventing contamination. Refer to Removal of Personal Protective Equipment in Appendices 6 and 7
- If reusable, send the eye protection for cleaning and disinfection according to facility policy

Gloves

- Are worn when entering the room or patient's designated bed space in shared room
- Are removed before leaving the room or the patient's designated bed space

Gowns

- Are worn if clothing or forearms will have direct contact with the patient
- Are worn if it is anticipated clothing or forearms will be in direct contact with frequently touched environmental surfaces or objects, and there is an increased risk of the environment being contaminated (e.g., incontinent patient, diarrhea, or drainage from wound, colostomy or ileostomy not contained by dressing)

Remove gown before leaving the room or patient's designated bed space.



8.6 Patient Transport

Patient transport out of the room is for medically essential purposes only.

In advance of the procedure, notify the Patient Transport Services and the receiving department regarding the need for Droplet/Contact Precautions

Maintain Droplet/Contact Precautions while the patient is outside the isolation room

- Before use, cover the clean transport chair or stretcher with a cover sheet
- Clean gown and gloves for healthcare worker for transport. Take care not to contaminate the environment with soiled gloves
- The patient wears a surgical/procedure mask
- The patient performs hand hygiene prior to leaving the room
- Transport staff do not need to mask if patient wears a mask
- After use, clean and disinfect the transport chair/stretcher in the room
- Remove gown and gloves and perform hand hygiene before leaving the room
- The patient performs hand hygiene after removal of the surgical/procedure mask

8.7 Equipment and Environment

Patient-care equipment (e.g., thermometers, blood pressure cuffs, lifts/slings) should be dedicated to the use of the patient and cleaned and disinfected before reuse with another patient.

Disposable patient care equipment and supplies shall be discarded.

Toys and personal effects should not be shared with other patients.

The patient record and other papers shall not be taken into the room. If the patient record is required to accompany the patient for tests or treatments, it shall be placed in a protective cover to prevent contamination.

If personal documents are required to be taken into the room

- Wipe the table the document is to be signed with facility- approved disinfectant
- The patient shall perform hand hygiene
- Patient should have a dedicated pen in the room. If not, after signing, wipe the pen with facility-approved disinfectant



All horizontal and frequently touched surfaces shall be cleaned daily and immediately when soiled.

Special cleaning procedures may be required in an outbreak situation. This will be determined in consultation with Infection Prevention and Control.

8.8 Patient/Family

The patient and/or family should be educated about the nature of the patient's infectious disease, the precautions to adhere to, and the length of time the precautions will be in place. Refer to the 'Patient/Family Information Sheet on Droplet/Contact Precautions' in Appendices 12.5 and 13.

Instruct the patient/family regarding Respiratory Hygiene/Cough Etiquette

- When coughing or sneezing, cover the nose and mouth with a tissue, or cough into his/her shoulder
- Immediately dispose of the tissue in the appropriate waste receptacle, and
- Perform hand hygiene

Refer to the Cover Your Cough Pamphlet in Appendix 9.

Instruct the patient about the appropriate use and management of PPE

- How to correctly apply and wear a surgical/procedure mask
- How to remove the surgical/procedure mask to prevent contamination
- Know the procedure and importance of hand hygiene following removal of the surgical/procedure mask

If required, instruct the family about assisting with application of the surgical/procedure mask for the patient.

Instruct the patient and family about preventing transmission of the infectious disease to his/her family, and friends during his/her hospital stay and upon his/her return to the community.

Instruct the patient and family about the procedure, and importance of hand hygiene.



8.9 Visitors

Visitors shall be informed about the precautions to adhere to.

Instruct the visitors about the procedure, and importance of performing hand hygiene.

Visitors shall wear a surgical/procedure mask when within one metre of the patient with the following exceptions

- Visiting patients with Rubella, a surgical/procedure mask is not needed if the visitor is immune
 - Non-immune visitors should enter the patient's room only if necessary and wear a surgical/procedure mask
- For patients with acute viral respiratory infections, surgical/procedure masks may not be mandatory for visitors. The risk to the health of the visitor should be evaluated

The nurse shall talk with visitors before entering the isolation room, and

- Assess the risk to the health of the visitor and the risk of the visitor transmitting infection
- Shall instruct the visitor about the appropriate use of the surgical/procedure mask
- If indicated, shall instruct the visitor about the appropriate use of gowns, gloves and other precautions

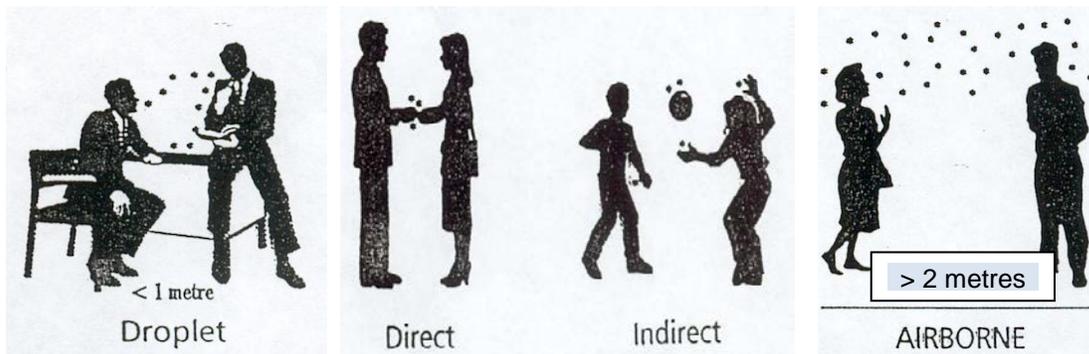
Keep the number of visitors to a minimum (at the discretion of the unit staff).



9. Enhanced Droplet/Contact Precautions

9.1 Introduction

Enhanced Droplet/Contact Precautions are required for patients diagnosed with, or suspected of having infectious microorganisms transmitted by the Droplet/Contact route, and the airborne route during aerosol-generating medical procedures (AGMPs). Refer to [Appendix A](#) for examples of AGMPs. Enhanced Droplet/Contact Precautions are implemented according to the Clinical Presentation/Microorganism/Infectious Disease Table. Refer to this table for specific disease/microorganism information.



Follow **Enhanced Droplet/Contact Precautions** in addition to **Routine Practices**. Healthcare workers (HCWs) shall adhere to **Routine Practices** at all times.

9.2 Indications for Enhanced Droplet/Contact Precautions

Implement Enhanced Droplet/Contact Precautions as directed by the WRHA IP&C Program.

Implement Enhanced Droplet/Contact Precautions as indicated in the Clinical Presentation/Microorganism/Infectious Disease Table. Refer to the WRHA Hospital IP&C Manual Implementation of Additional Precautions section: [Infection Prevention & Control Acute Care Manual](#).

9.3 Source Control

Implement droplet precautions empirically for patients with conditions listed in the Clinical Disease microorganism Table without waiting for the etiology to be determined.

9.3.1 Triage

Instruct patient to put on a mask and clean their hands as per “cover your cough etiquette”.

Direct patients with acute respiratory symptoms to a separate waiting area or place patient in a single room or pull privacy curtain in multi bed room.



9.4 Infection Prevention and Control Practices

9.4.1 Accommodation

- A single room with in room dedicated toilet, and sink bathing is required.

Consult Infection Prevention and Control if a single room is not available. Where considering cohorting with other patients with the same organism or household members with similar symptoms and exposure, the following are required:

- Dedicated in room hand hygiene, toileting and bathing
- A separation of ideally 2 metres; minimally 1 metre between patients, with privacy curtains drawn

For direction in newborn nurseries, consult Infection Prevention and Control.

9.4.2 Hand Hygiene

Hand hygiene shall be performed according to the 4Moments of Hand Hygiene:

- Before initial patient/patient environment contact
- Before aseptic/clean procedures
- After body fluid exposure risk
- After patient/patient environment contact

9.4.3 Personal Protective Equipment (PPE)

PPE, including the following are applied before entering the room/bed space:

- Gloves
- Gown
- Procedure or surgical mask/N95 respirator
 - N95 respirators are only indicated during AGMPS (refer to Appendix A for list of AGMPS).
- Face shield or safety glasses or goggles

Refer to [Putting it On/Taking it Off](#) posters (available online, in this manual or for order through [HSC Print Shop](#)) for additional information.

9.4.4 Patient Transport

Only transport patient out of the room for medically essential procedures or diagnostic tests.

Notify **Patient Transport Services** and the **receiving department** regarding the need for **Enhanced Droplet/Contact Precautions** in advance of the procedure/transport/transfer.



Maintain Enhanced Droplet/Contact Precautions while the patient is outside the isolation room:

- Control and secure traffic pathways (e.g., dedicate corridors and elevators). Take care not to contaminate the environment with soiled gloves during transport.
- If transporting patient in their own bed, clean and disinfect bed side rails, foot and headboard and high touch areas.
- Before use of transport chair or stretcher, cover the clean transport chair or stretcher with a cover sheet.
- HCWs involved in transport:
 - Must discard PPE as they leave the room, and put on new PPE prior to transporting patient.
 - Apply a procedure or surgical mask, clean isolation gown and clean gloves for transport. Change gloves and perform hand hygiene if soiled during transport.
- Patient
 - Do not place patient in isolation gown.
 - Apply a procedure or surgical mask if tolerated. If not tolerated or effective, practice Respiratory Etiquette, i.e., loosely cover the mouth or nose with a tissue, or cloth, or if transported in a stroller cover with a sheet. Cloths used are considered contaminated.
 - An incubator can be used in infant transport instead of mask or tissues.
 - Performs hand hygiene prior to leaving the room and after removal of the procedure or surgical mask and after the transport is complete.
- After use, clean and disinfect the transport chair or stretcher.
- After transport, HCWs perform hand hygiene after removing PPE. Refer to Putting it On/Taking it Off poster for additional information.

9.4.5 Equipment and Environment

Dedicate patient care equipment (e.g., thermometers, blood pressure cuffs, lifts/slings) to the use of the patient. If this is not possible, appropriately clean and disinfect shared equipment before reuse with another patient.

Discard disposable patient care equipment and supplies.

Do not share toys and personal effects with other patients. Clean all horizontal and frequently touched surfaces twice¹ daily and immediately when soiled.

Special cleaning procedures may be required in an outbreak situation. This will be determined in consultation with Infection Prevention and Control.



9.4.6 Health Record/Health Record Documents, Other Papers

Health Record/Health Record Documents, e.g., vital sign sheets, Medication Records/Personal documents, Health Record, election ballot:

- Do not take the health record, medication administration record (MAR), or mobile computer into the isolation room.
 - If the MAR has been in the isolation room: wipe the pen and external surface of the MAR with facility-approved disinfectant upon leaving. Allow to air dry completely.
- Consider using PYXIS slips to perform bedside checks.

Other papers that must be brought into the patient room for the patient to touch (e.g., legal)

- Assist patient to perform hand hygiene.
- Wipe the surface/table the document will be placed on with facility-approved disinfectant. Allow to air dry completely before placing items on the surface/table.
- Prior to removing papers and pen from the room, wipe the pen with facility-approved disinfectant.
- Use disposable folders or wipeable clipboards for holding paper documents. Wipe with disinfectant and allow to air dry completely before placing on clean surface outside the doorway or discard prior to leaving the room.

9.4.7 Patient/Family/Visitor

Patient:

Unit staff shall educate the patient and/or family/ caregiver about:

- Hand hygiene
- The nature of their disease
- Precautions to follow
- The length of time the precautions are anticipated to be in place
- Visitor restrictions
- How to prevent transmission of the infectious disease to family/friends during their hospital stay, and on return to the community.

Family/Visitors:

Follow facility visiting policies.

Individuals with symptoms of an acute respiratory infection should be referred for medical assessment and restricted from visiting except for compassionate reasons. Those who do visit should be instructed in performing hand hygiene, respiratory hygiene, and use of PPE, be



instructed to limit their movement within the facility by **visiting the patient directly and exiting directly after the visit.**¹

Instruct visitors to speak with a nurse before entering the room of a patient on Enhanced Droplet/Contact Precautions to evaluate the risk to the health of the visitor and the ability of the visitor to comply with precautions, including PPE and hand hygiene. Visitors are offered and encouraged to use the same PPE as staff. The number of visitors should be minimized to essential visitors (e.g., immediate family member/parent, guardian or primary caretaker) only. Visitors should be restricted to visiting only one patient who is on Additional Precautions. If the visitor must visit more than one patient, the visitor is required to perform hand hygiene before going to the next patient's room, and to use the same PPE as healthcare workers (HCWs).

When asymptomatic parents/guardians visit their symptomatic child/children, they should be informed of: the need for appropriate hand hygiene, their choice to use PPE while in the patient's room, or not and potential inability to visit other patients if the parent/guardian chooses not to wear Personal Protective Equipment.

9.5 References

- 9.5.1 Interim Guidance - Middle East respiratory syndrome coronavirus (MERS-CoV). (2013) Public Health Agency of Canada. Available at: <http://www.phac-aspc.gc.ca/eri-ire/coronavirus/guidance-directives/nCoV-ig-dp-eng.php>.
- 9.5.2 Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care. Manitoba Health. (2012 April). Available at: <http://www.gov.mb.ca/health/publichealth/cdc/docs/ipc/rpap.pdf>

Review Date: June 2018

Specific Disease Protocol Contacts:

Janice Briggs, Specialist, WRHA Infection Prevention and Control Program

Jen Tomlinson, Clinical Team Lead, Health Sciences Centre

Janis Kennedy, Infection Control Professional, St. Boniface Hospital

Appendix A: Aerosol Generating Medical Procedures on a patient on Enhanced Droplet/Contact Precautions

Introduction

An aerosol generating medical procedure (AGMP) is any procedure conducted on a patient that can induce production of aerosols of various sizes, including droplet nuclei. Examples include:

- Intubation and related procedures (e.g., manual ventilation, extubation, open endotracheal suctioning)
- Cardiopulmonary resuscitation
- Bronchoscopy
- Sputum induction
- Nebulized therapy
- Autopsy
- Non-invasive positive pressure ventilation (CPAP, BiPAP)

AGMPs should be performed on patients only when medically necessary.

Personal Protective Equipment (PPE)

N95 Respirator, eye protection, gloves, and a long sleeved gown are worn by all persons in the room where an AGMP is being performed:

- Put on all PPE before entering the room/bed space
- N95 Respirator shall be:
 - fit tested for HCWs
 - seal-checked prior to each use, as follows:
 - cover respirator with both hands
 - perform an exhalation test: If no air escapes respirator, there is an adequate seal
 - Changed if contaminated/wet

Respirators shall never be dangled around the neck or reused.

- Before leaving the room/bed space remove gloves, and long sleeved gown
- After leaving the room/bed space remove N95 Respirator and eye protection

Early recognition of patients who may require an AGMP is necessary to ensure procedures are conducted in a controlled setting, which includes:

a. Administrative Controls:

- The most experienced personnel perform the procedure
- The number of individuals present during AGMPs should be limited to only those essential to patient care and support
- Conduct procedures in a non-emergent manner (e.g., elective intubation)
- Sedate patient if intubation is required
- Ensure adequate equipment is in the room/bed space prior to procedure

b. Engineering Controls

- Place patient in an Airborne Infection Isolation Room (AIIR) to perform an AGMP.
If not available:
 - Place patient in a single room, away from immunocompromised patients
 - Consult Infection Prevention and Control
- Close doors and windows

c. Environmental Controls

- Clean and disinfect unused disposable supplies and products that are in the patient's room and that can tolerate the process. When the patient is transferred or discharged:
 - Unused disposable supplies that have been cleaned and disinfected may be returned to the unit's Clean Supply Room
 - Unused disposable supplies that have non-intact packaging or cannot tolerate cleaning and disinfection are discarded
- Clean & disinfect contaminated reusable equipment before removing from room/bed space