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 both the Droplet and Contact routes, as well as by droplet nuclei suspended in the air during aerosol generating medical procedures (AGMP). Refer to the WRHA Hospital IP&C Manual, Additional Precautions Section for descriptions of Droplet and Contact transmission at: http://home.wrha.mb.ca/prog/ipc/files/hospitalmanual/ManualHospital_Full.pdf.

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

9.2 Indications for Enhanced Droplet/Contact Precautions

Implement Enhanced Droplet/Contact Precautions when:
- Providing care for a patient who is non-compliant with Respiratory Etiquette, and has suspected or confirmed severe respiratory illness (SRI), and a forceful cough.
- Conducting an AGMP on a patient with suspect or confirmed ILI

Refer to the WRHA Hospital IP&C Manual Implementation of Additional Precautions section as well as the Clinical Presentation/Microorganism/Infectious Disease Table: http://home.wrha.mb.ca/prog/ipc/files/hospitalmanual/ManualHospital_Full.pdf. Additional information may be provided by Manitoba Health and/or the WRHA.
9.3 Aerosol Generating Medical Procedures

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, open endotracheal suctioning)
- Cardiopulmonary resuscitation
- Bronchoscopy
- Sputum induction
- Nebulized therapy
- Autopsy
- Non-invasive positive pressure ventilation (CPAP, BiPAP)

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:
   - Most experienced personnel perform the procedure
   - Keep the number of people in the room to a minimum; ask visitors to leave
   - 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:
   - Close doors and windows
   - An Airborne Infection Isolation Room (AIIR) is preferred
     - If an AIIR is unavailable, use a single room with adequate ventilation
     - If a single room is unavailable, ensure a separation of ideally 2 metres; minimum 1 metre between patients, with privacy curtains drawn

c. Environmental Controls:
   - Discard contaminated disposable equipment
   - Clean/disinfect contaminated reusable equipment before leaving the room/bed space
   - All personnel in the room must wear an N95 respirator, eye protection, gloves, and a long sleeved gown
9.4 Accommodation

Patients shall preferably be placed in a single room. No special air handling and ventilation are necessary; these are only required for aerosol generating medical procedures

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

Consult Infection Prevention and Control for cohorting if a single room is not available. In instances where there are not a sufficient number of single rooms, cohort patients with the same microorganism or exposure history together.

- Maintain a separation of ideally 2 metres; minimally 1 metre between patients
- Instruct all visitors of precautions to follow
- Select roommates for their ability, and that of their visitors, to comply with Enhanced Droplet/Contact Precautions.
- Select roommates who are not at high risk for acquiring an infection (e.g., chronic lung disease, severe congenital heart disease, immunodeficiency)

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

9.5 Hand Hygiene

Hand hygiene shall be performed before and after any direct contact with a patient or patient equipment, between procedures on the same patient, and before contact with the next patient. Healthcare workers shall perform hand hygiene before leaving the room/bed space. After performing hand hygiene, take care to not contaminate hands.

THE 4 MOMENTS FOR HAND HYGIENE:

1. **BEFORE INITIAL PATIENT/PATIENT ENVIRONMENT CONTACT**

   *When?* Clean your hands when entering a patient care environment
   - Before entering the patient/treatment/exam room
   - Before touching patient (e.g., shaking their hand, helping the patient move around)
   - Before touching any object or furniture in the patient’s environment (e.g., stretchers, wheelchairs, adjusting an IV, silencing a pump)
2. BEFORE ASEP'TIC/CLEAN PROCEDURES

When? Clean your hands immediately before any aseptic procedure
- Performing invasive procedures
- Handling dressings or touching open wounds
- Preparing and administering medications
- Preparing, handling, serving or eating food
- Feeding a patient
- Shifts and breaks

3. AFTER BODY FLUID EXPOSURE RISK

When? Clean your hands immediately after an exposure risk to blood and body fluids, non-intact skin, and/or mucous membranes (and after glove removal).
- Contact with blood and body fluids
- Contact with items known or considered to be contaminated
- Procedures on the same patient where soiling of hands is likely, to avoid cross-contamination of body sites
- Oral care, wound care, patient toileting
- Removal of gloves
- Personal use of toilet or wiping nose/face
- Feeding a patient
- Before and after shifts and breaks

4. AFTER PATIENT/PATIENT ENVIRONMENT CONTACT

When? Clean your hands when leaving the patient/patient environment.
- After touching patient to assist with any tasks (e.g., helping a patient mobilize; giving a massage; taking pulse, blood pressure, chest auscultation, abdominal palpation) or
- After touching any object or furniture in the patient’s environment (e.g., changing bed linen, perfusion speed adjustment, alarm monitoring, clearing the bedside or overbed table)

9.6 Personal Protective Equipment (PPE)

Apply a procedure or surgical mask prior to entering the room/bed space. Apply an N95 respirator prior to entering the room/bed space:
- When providing care to a patient who is non-compliant with Respiratory Etiquette and has a forceful cough
- By all individuals in the room when an AGMP is performed

Masks shall be
- Worn once and changed
  - When wet
  - If the front of the mask has been touched, and/or
5.3

Masks shall never dangle around the neck.

N95 respirators shall be:
- Fit tested for healthcare workers, as directed by Occupational and Environmental Safety and Health
- Seal-checked by healthcare workers prior to each use, 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

Eye protection is worn prior to entering room/bed space, and removed in a manner preventing contamination.
- If reusable, send the eye protection for cleaning and disinfection according to facility protocol

Gloves are
- Worn before entering the room/bed space
- Removed before leaving the room/bed space
- Changed between procedures if contaminated

Remove gloves before leaving the room/bed space.

Gowns are
- Worn before entering the room/bed space
- Removed before leaving the room/bed space
- Changed between procedures if contaminated/wet

Remove gown before leaving the room/bed space.

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

- Determine how traffic pathways will be controlled and secured (e.g., dedicate corridors and elevators). Take care not to contaminate the environment with soiled gloves during transport.
- Healthcare workers involved in transport should wear the following: clean gown, gloves, eye protection, and a procedure or surgical mask.
- An N95 respirator is worn when transporting a patient who is unable to wear a mask.
- The patient
  - Wears a procedure or surgical mask. If an air leak is present (e.g., patient wearing mask to deliver oxygen therapy), loosely cover the mouth or nose with a facecloth or similar cloth. Cloths used to cover the site of the leak are considered contaminated. If unable to keep a mask on a child, use tissues to cover the nose and mouth. An incubator can be used in infant transport instead of mask or tissues.
  - Performs hand hygiene prior to leaving the room.
- After use, clean and disinfect the transport chair or stretcher with a cover sheet in the room.
- After transport, healthcare workers remove gloves and gown (and then perform hand hygiene) before leaving the room/bed space. The procedure or surgical mask, or N95 respirator, and eye protection, are all removed after leaving the room/bed space. Perform hand hygiene again.

9.8 Equipment and Environment

Patient care equipment (e.g., thermometers, blood pressure cuffs, lifts/slings) should be dedicated to the use of the patient. If this is not possible, it must be cleaned and disinfected before reuse with another patient.

Discard disposable patient care equipment and supplies.

Do not share toys and personal effects with other patients.

Do not take the patient record and other papers 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
- Instruct the patient to perform hand hygiene
• Provide the patient with a clean pen. After signing, if the pen is being removed from the room, wipe with facility-approved disinfectant.

Clean all horizontal and frequently touched surfaces 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.

9.9 Patient/Family/Visitor

Patient:
Unit staff shall educate the patient about the:
• Nature of their disease
• Precautions to adhere to
• The length the precautions will be in place
• Visiting policies including:
  o Visiting hours
  o Number of visitors allowed
• How to prevent transmission of the infectious disease to family/friends during their hospital stay, and on return to the community.

Family/Visitors:
Keep visitors to a minimum.

Unit staff shall educate families/visitors before they enter the patient’s room/bed space about:
• How to prevent transmission of the infectious disease to other patients or family members in the facility, and upon return to community
• The importance of, and how to perform, hand hygiene both before and after visiting the patient
• How to assist the patient with hand hygiene
• How to apply and remove PPE for themselves as well as the patient
• Respiratory Etiquette
  o Cough or sneeze into your sleeve, or cover your nose and mouth with a tissue
  o If a tissue is used, immediately dispose of it into a waste receptacle, and perform hand hygiene

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

9.10 References:

