ROCHESTER REGIONAL HEALTH

Policy & Procedure

Title:	Transmission Based Precautions	Date of Origin:	3/17	Policy #:	IP5		
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Affiliate(s):	☒ **Hospital**: ☒ RGH ☒ NWCH ☒ Clifton Springs ☒ UMMC ☒ Unity ☐ **Hospital Subcategories:** ☒ Inpatient Services ☒ Outpatient Services ☐ ElderOne (ext. clinics) ☐ PCASI ☐ SMS ☒ Behavioral Health ☐ **Lifetime (Homecare and Hospice)** ☐ **Lifetime Pharmacy** ☐ **Homecare Plus** ☒ **Long Term Care** ☒ Clifton Springs Nursing Home ☒ DeMay Living Center ☒ Edna Tina Wilson Living Center ☒ Hill Haven ☒ Park Ridge Living Center ☒ Unity Living Center ☒ **Elder One – PACE** ☐ **RMHC** ☐ **ACM Laboratory** ☐ **NonArticle 28 Practices (WNY)** ☐ **Ambulatory Surgery Centers** ☐ **PRCD, Inc.**
	For purposes of this policy, "Rochester Regional Health" shall collectively refer to the affiliates identified in the header of the policy.
Policy Statement:	To prevent unprotected exposure of patients, visitors, or staff to potentially infectious microorganisms or diseases To prevent the spread of healthcare or community-acquired infections
Definitions:	**Transmission-Based Precautions** are used for patients who are known or suspected to be infected/colonized with infectious agents, including certain epidemiologically important pathogens, which require additional control measures beyond Standard Precautions to effectively prevent transmission. They include contact, droplet, and airborne precautions. For some diseases that have multiple routes of transmission, more than one precautions category may be used. Since the infecting agent often is not known at the time of admission to a healthcare facility, Transmission-Based Precautions are used empirically, according to the clinical syndrome and the likely etiologic agents at the time, and then modified when the pathogen is identified or a transmissible infectious etiology is ruled out. **Contact Precautions** are intended to prevent transmission of infectious agents which are spread by direct contact with the patient (hand or skin-to-skin contact that occurs

when performing patient-care activities that require touching the patient) or indirect contact with an intermediate object/person (e.g. environmental surfaces or items in the patient's environment).

Contact Precautions also apply where the presence of excessive wound drainage, fecal incontinence, or other discharges from the body suggest an increased potential for extensive environmental contamination and risk of transmission.

Enhanced Contact Precautions are intended to prevent the transmission of extremely drug resistant pathogens including CRE (Carbapenem Resistant Enterobacteriaceae), VRSA (Vancomycin Resistant Staph Aureus), VISA (Vancomycin Intermediate Staph Aureus), and Candida auris, which are spread by direct contact with the patient (hand or skin-to-skin contact that occurs when performing patient-care activities that require touching the patient) or indirect contact with an intermediate object/person (e.g. environmental surfaces or items in the patient's environment).

Droplet Precautions are intended to reduce the risk of respiratory droplet transmission of infectious agents. This involves contact of the mucous membranes with large-particle droplets generated from the infectious patient. Droplets are generated primarily from coughing, sneezing, talking, or during the performance of certain procedures involving the respiratory tract (e.g. suctioning). Transmission requires close contact because droplets do not remain suspended in the air and generally travel only short distances.

Airborne Precautions are used for patients known or suspected to be infected with microorganisms transmitted by airborne droplet nuclei (small particle residue 5 microns or smaller in size) of evaporated droplets containing microorganisms that remain suspended in the air for long periods of time and can be dispersed widely by air currents. They can be inhaled or deposited on mucous membranes of a susceptible host.

Enhanced Isolation Precautions are intended to prevent the transmission of novel or high consequence pathogens that could be easily disseminated or transmitted from person to person, for which methods of transmission are still under investigation, and/or for which there may be the potential for high morbidity/mortality. This could include pathogens such as Coronavirus Disease 19 (COVID-19), Middle Eastern Respiratory Syndrome (MERS), or Ebola.

Cohorting is the practice of grouping together patients who are colonized or infected with the same organism to confine their care to one area and prevent contact with other patients. Cohorts are created based on clinical diagnosis, microbiologic confirmation when available, epidemiology, and mode of transmission of the infectious agent.

Policy:

1. Standard Precautions are used in the care of all patients (See policy IP9 – Standard Precautions). When transmission-based precautions are used, either singularly or in combination, they are to be used in addition to Standard Precautions.
2. Transmission based precautions are to be used for clinical syndromes or conditions as noted in Appendix A (Type and Duration of Precautions Recommended for Selected Infections and Conditions, CDC 2007)
3. Contact Precautions requires the use of gloves and a gown when entering the room regardless of patient contact. For those departments using the Safe Zone/Red Box concept the requirements are described below.
4. Enhanced Contact Precautions requires the use of gloves and a gown when entering the room, regardless of patient contact. It also requires use of dedicated equipment and limiting the number of staff members caring for this patient.
5. Droplet Precautions requires the use of a surgical/procedural mask when entering the room.
6. Airborne Precautions requires
   a. Use of a fit-tested hospital-approved N95 particulate respirator or PAPR (powered air purifying respirator) when entering the room.
   b. A private, negative-pressure room that meets the AIA/FGI (American Institute of Architects/Facility Guidelines Institute standards including monitored negative pressure relative to the surrounding area, 12 air exchanges per hour for new construction/renovation or 6 per hour for existing facilities, air exhausted directly to the outside or recirculated through HEPA filtration before return.

Procedure:

Contact Precautions

1. When available, place patient in a single-patient room with a bathroom. When single-patient rooms are not available, follow the guidelines for cohorting below.
   - In ambulatory settings, place patients who require Contact Precautions in an exam room or cubicle as soon as possible.

2. Use of PPE (Personal Protective Equipment):
   a. Perform hand hygiene before donning PPE
   b. Gloves – don upon entry into the room or cubicle
   c. Gowns –don gown upon entry into the room or cubicle
   d. Remove gloves and gown and perform hand hygiene before leaving the patient-care environment

3. Safe Zone/Red Box Concept
   a. For hospitals that utilize the Safe Zone or Red Box, this is an area at the entrance of a patient room where the healthcare worker may stand and converse with the patient/family without donning PPE, thus reducing barriers to staff-patient communication and speeding up response times for patients'

routine needs.
   b. Tape on the floor is used to identify the boundaries of the Safe Zone/Red Box
   c. Nothing from the room may be in reach while in the Safe Zone/Red Box
   d. Some rooms are ineligible due to the room layout.

4. Units/facilities are not required to implement the Safe Zone/Red Box.

Enhanced Contact Precautions

Enhanced Contact Precautions is Contact Isolation which also includes:

1. Place the patient in a private room.
2. Post the "Enhanced Contact Precautions" sign
3. Minimize the number of persons caring for the patient (i.e., assign minimal numbers of dedicated staff to care for the patient – the same staff cares for the patient each day and shift).
4. Patient may only leave room for medically necessary procedures. Assurance is made that receiving area is aware of need for Enhanced Contact Precautions.
5. Patient will have dedicated and/or disposable equipment, including: blood pressure cuff, stethoscope, pulse oximeter, EKG leads, computer on wheels, and thermometer.
6. Educate and inform the appropriate personnel about the presence of a patient with these organisms and the need for Enhanced Contact Precautions, including but not limited to:
   - Patient's providers
   - Admitting
   - All unit staff
   - Transporters
   - EVS (Environmental Services)

7. EVS will implement enhanced daily cleaning. This includes not bringing any items into the patient room, using the bleach wipes located in the room and designating a toilet brush. Privacy curtains will be washed at discharge and room disinfected with the UV light.
8. Enhanced Contact Precautions can only be discontinued by the Infection Preventionist.
9. During times of decreased availability of N95s, the CDC has issued interim guidance for managing patients requiring Enhanced Isolation Precautions. See Attachment 3: Interim Guidance for Managing Enhanced Isolation Precautions During Period of Reduced Supply of Personal Protective Equipment.
10. Specific guidelines have been developed for managing patients on Enhanced Isolation precautions for Imaging procedures. See Attachment 4: Guidelines for Imaging for Patient on Enhanced Isolation precautions.

Droplet Precautions

1. When available, place patients in a single-patient room with a bathroom. When single-patient rooms are not available prioritize patients who have excessive cough and sputum production for single-patient room placement
2. If it becomes necessary to place a patient in a room with a patient who does not have the same infection, the following guidelines apply:
    a. Follow cohorting guidelines listed below
    b. Ensure that patients are physically separated (i.e. >3 feet apart) from each other.
    c. Draw the privacy curtain between beds to minimize opportunities for close contact
3. In ambulatory settings, place patients who require Droplet Precautions in an examination room or cubicle as soon as possible. Instruct patients to follow recommendations for Respiratory Hygiene/Cough Etiquette.
4. Use of Personal protective equipment. Don a mask upon entry into the patient room or cubicle.
5. Eye protection is also required for any throat assessment or nasopharyngeal specimen collection.

Airborne Precautions

1. Place patients in an Airborne Infection Isolation Room (AIIR). In Long Term Care (LTC), contact Infection Prevention how to manage patient if AIIR is not available.
2. Prior to patient placement, negative pressure will be checked to verify that it is functioning correctly. This includes assessment of the visual monitors (if present) and performance of a smoke or tissue test. Testing of the negative pressure will be repeated daily and documented for the duration of time the patient remains on Airborne Precautions.
3. The door to the corridor and any functioning windows must remain closed at all times when not required for entry and exit. Enter through separate anteroom door if present.
4. In ambulatory settings, place a surgical mask on the patient and place him/her in an examination room. Once the patient leaves the room, it should remain vacant for one hour, to allow for a full exchange of air. For measles contact Infection Prevention.
5. Non-immune healthcare workers should not care for or enter a room of patients with known or suspected vaccine-preventable airborne diseases (e.g. measles [Rubeola], Varicella [chickenpox], smallpox) regardless of the use of personal protective equipment. Healthcare workers who are presumed to be immune based on history of disease, vaccine, or serologic testing should wear appropriate PPE regardless of their immune status.
6. Prior to entering an AIIR, the healthcare provider is to assure that they are wearing the N95 respirator that they were fit tested for. Additionally, they must fit check the N95 respirator. This is done by cupping their hands around the mask and exhaling. If they feel any air escaping, they are to adjust the straps and nose

piece until they no longer feel air. If the team member is not fit tested or has failed their fit test, the Powered Air Purifying Respirator (PAPR) can be used. If the appropriate PPE or a PAPR is not available, contact Infection Prevention immediately.

Refer to the Tuberculosis Control Plan (policy IP16 Attachment 1) for additional information.

Enhanced Isolation Precautions

Enhanced Isolation Precautions include Standard, Contact, and Airborne Precautions as well as Eye Protection (goggles or face shield).

1. Place the patient in a private room. In LTC, contact Infection Prevention to determine placement.
2. Post the "Enhanced Isolation Precautions" sign
3. Minimize the number of persons caring for the patient (i.e. assign minimal numbers of dedicated staff to care for the patient; the same staff cares for the patient each day and shift).
4. All personnel entering the room must wear isolation gown, gloves, N95 mask (or PAPR), and eye protection such as disposable goggles or face shield.
5. Follow instructions for Contact Precautions and Airborne Precautions described in other sections of this policy.
6. Patients should only leave the room for medically necessary procedures. If at all possible, procedures should be done in the patient room.
    a. If the patient needs to leave the room the receiving department should be notified about the need for Enhanced Isolation Precautions.
    b. The patient should wear a facemask to contain secretions and be covered with a clean sheet.
    c. If staff must prepare the patient for transport (e.g., transfer them to the wheelchair or gurney), they should wear all recommended PPE, remove it once transfer to bed or gurney is completed, and perform hand hygiene.

       Use of a facemask by the transporter is recommended for anything more than brief encounters (>1-2 minutes) with patients. Therefore, the transporter should wear the appropriate facemask during transport. For convenience, if the transporter was involved in transferring the patient to the wheelchair or gurney as described above, the transporter could continue to wear their respirator (after removing all other PPE). Additional PPE should not be required unless there is an anticipated need to provide medical assistance during transport (e.g., helping the patient replace a dislodged facemask).

    d. For areas such as LTC, where transport out of the building or use of mobile services may be required, staff should consult Infection Prevention to develop an appropriate plan based on the situation.

e. For areas such as Radiology, room turnover must follow airborne isolation practices, and once the patient leaves the room, it should remain vacant for one hour, to allow for a full exchange of air. Refer to the Tuberculosis Control Plan (policy IP16 Attachment 1) for additional information.

7. Patients will have dedicated and/or disposable equipment, including BP cuff, stethoscope, thermometer, EKG leads, pulse oximeter, computer on wheels.
8. Isolation cannot be discontinued without approval of Infection Prevention.

Initiation of Isolation Precautions

Syndromic or Empiric Application of Isolation Precautions:
Diagnosis of many infections requires laboratory confirmation. Since this can often require two or more days for completion, this could allow for additional exposure to infectious disease while test results are pending. Certain clinical syndromes and conditions (Table 2 Clinical Syndromes or Conditions Warranting Empiric Transmission-Based Precautions in Addition to Standard Precautions Pending Confirmation of Diagnosis) carry a sufficiently high risk to warrant their use on an empirical basis while tests are pending.

1. Any physician or nurse may institute isolation precautions based on the patient's symptoms or known/suspected illness/infection as defined in Table 2 or Appendix A (Type and Duration of Precautions Recommended for Selected Infections and Conditions – CDC)
2. A physician's order is not required. Documentation should be done in the EMR per individual facility requirements.
3. Isolation signs include Contact Precautions, Droplet Precautions, Airborne Precautions, Enhanced Precautions, Contact Precautions for C diff patients, and Modified Contact Precautions for LTC and are stored based on the type of isolation caddie used at the respective facility.
4. The nurse admitting or caring for the patient is responsible for posting the appropriate sign and ensuring appropriate PPE is available for use via the isolation caddy/storage unit.
5. If a patient is being considered for common respiratory pathogens, prior to testing for a high-consequence pathogen, such as COVID-19, the patient should be placed on **droplet precautions**, unless there is a high suspicion of the high-consequence pathogen, which would elevate the isolation to enhanced isolation precautions.
    a. A patient will be placed directly on enhanced isolation precautions, if they have respiratory symptoms and have had contact with a confirmed case of COVID-19 or traveled to an area of COVID-19 ongoing transmission.
    b. A patient without contact with a confirmed COVID-19 case or region

with ongoing COVID-19 transmission, will remain on droplet precautions, with the addition of eye protection when the patient is not masked, until respiratory testing is complete and either they are maintained on droplet precautions for a known respiratory pathogen, or COVID-19 testing is ordered and their isolation is elevated to enhanced isolation precautions.

i. If a patient is on droplet precautions to rule out common respiratory pathogens and they have a test requiring transport to another department, such as Radiology, the patient should wear a surgical mask. If mask remains on the patient, room turnover follows typical cleaning for patient with droplet isolation. If mask is removed: once the patient leaves the room, the room should remain vacant for one hour (or longer based on facility air exchanges), to allow for a full exchange of air. Refer to the Tuberculosis Control Plan (policy IP16 Attachment1) for additional information.

If no anteroom is available, a trash can is to be placed outside the door for mask disposal for a patient on Airborne Precautions.

Patient Transport

1. Activities of the patient may need to be limited. This will be determined on a case-by-case basis.
   a. Patients may be transported to other departments for diagnostic testing or therapeutic procedures when medically necessary.
   b. Limit transport outside the room for medically-necessary reasons only for patients on Airborne Precautions

2. Patients on Droplet, Airborne, or Enhanced Isolation precautions must wear a surgical mask when out of their room and observe Respiratory Hygiene/Cough Etiquette.
3. Patients on Contact, Enhanced Contact, and Enhanced Isolation Precautions:
   a. Have patient perform hand hygiene and ensure they are wearing a clean patient gown.
   b. Place clean linen as a barrier on wheelchairs/stretchers
   c. Ensure that infected areas of the patient's body are contained and covered. (e.g. For patients with skin lesions associated with Varicella or smallpox or draining skin lesions caused by M. tuberculosis, cover the affected areas to prevent aerosolization or contact with the infectious agents.)
   d. Don PPE (gown and gloves) to transfer patients to the wheelchair/stretcher. Remove PPE and perform hand hygiene prior to transporting patient.
   e. Clean any portion of the wheelchair or stretcher that is touched during transport using a hospital-approved disinfectant

f. Don clean PPE as necessary if assisting the patient at the transport destination.

4. PPE should not be worn by the transporter outside the room, with the following exceptions
   a. If it is necessary to touch a patient on Contact Precautions
   b. If warranted for adherence to Standard Precautions
5. If it is necessary to transport a patient in their bed, the areas of the bed, prior to transport areas of the bed that will be touched by the transporter should be cleaned with a hospital-approved disinfectant, to allow movement of the bed without wearing PPE.
6. Notify the receiving area of the necessary precautions using individual facility policies.

Ambulation Outside the Room

Physical Therapy may be ordered for patients on Contact Precautions to increase their ability to ambulate. Respiratory Therapy may need to ambulate patients outside the room to complete an ambulating pulse oximetry prior to discharge. Nursing may need to ambulate patients to facilitate recovery. Each patient with such an order is evaluated by the therapist/nurse. If the patient is cooperative, they may be ambulated outside the room with the following parameters:

1. Therapist/nurse assesses that the area in the hall is clear of activity
2. The patient is instructed that they are not to touch anything
3. The therapist/nurse dons a clean isolation gown and gloves and has the patient perform hand hygiene and wear a clean patient gown.

The therapist/nurse accompanies the patient throughout the time outside the room. If the patient touches anything, it is cleaned per policy by the therapist/nurse

Education of Staff, Patients and Families

1. Staff is educated about Standard and Transmission Based Precautions at General Orientation and annually
2. Patients and their families are educated about the necessary precautions at the time they are implemented. This is completed through verbal instructions and written materials.

Equipment

1. When possible, dedicate noncritical patient care items, such as blood pressure cuffs, thermometers, and stethoscopes, to a single patient.
2. When this is not possible,
   a. Place small equipment on a clean paper towel on the overbed/bedside table or in a clean exam glove.
   b. Ensure adequate cleaning and disinfection of items between patient encounters.

Laundry

The risk of disease transmission from laundry is negligible when it is handled, transported, and laundered in a safe manner.

1. Do not shake or handle in a way that may aerosolize infectious agents.
2. Avoid contact of one's body and personal clothing with the soiled items.
3. Contain soiled items in a laundry bag and transport to the appropriate location for soiled linen

Dishes and Eating Utensils

The combination of hot water and detergents used in dishwashers is sufficient to decontaminate dishes and eating utensils. No special precautions are needed for dishware (e.g., dishes, cups) or eating utensils.

Visitors

1. Visitation is not allowed by any ill individual or family member
2. The nursing personnel on the unit are responsible for assuring that visitors are properly educated prior to entering the patient's room.
3. All visitors should perform hand hygiene prior to entering a patient room and immediately after leaving the room. They should be educated on the importance of frequent hand hygiene in the hospital setting and on the available options and proper techniques for performing hand hygiene.

Contact Precautions:

1. Is not required for MRSA and VRE under routine circumstances.
2. Should be considered for patients infected with enteric pathogens (e.g. C. difficile, norovirus), especially when performing hands-on care such as toileting or diapering.
3. Should be used for visitors to patients either colonized or infected with extensively drug-resistant Gram-negative organisms
4. For parents/guardians/visitors with extended stay in a patient's room, including overnight visitation, isolation precautions may not be practical. The risk of infection is likely reduced if they practice good hand hygiene, and any additional benefit of wearing gowns and gloves in these scenarios of prolonged exposure is unclear. In special situations, in which patients acquire new transmissible infections after admission to the hospital, protection of parent/guardian/visitor by the use of isolation precautions may be considered.

Droplet Precautions:

Use of a surgical mask is recommended. However, visitors with extensive documented exposure to the symptomatic patient prior to hospitalization such as parents/guardians/family members may be excluded from these precautions; they may either be immune to the infectious agent or already in the incubation period. Among pediatric patients, further considerations should include interference with bonding. Isolation requirements should be considered on a case-by-case basis in some circumstances (e.g., highly virulent pathogen).

Airborne Precautions:
Use of a surgical mask is recommended. An alternative is an N95 respirator; however, this equipment is best used with training and fit testing. Visitors with extensive documented exposure to the symptomatic patient prior to hospitalization, such as household contacts, may be excluded from these precautions as they may be either immune to the infectious agent or already in the incubation period. In those instances in which prior extensive exposure is not documented and N-95 or higher respiratory protection is recommended for the patient, consideration should be given to limiting visitation for those who have not been fit tested.

Enhanced Isolation Precautions:

1. All visitors into the patient's room will be restricted.
2. Exceptions may be considered on a case-by-case basis for those who are essential for the patient's wellbeing.
3. Visitors will be required to wear PPE according to facility policy
4. Visitors will be added to the Contact Log

Cohorting

1. Contact Infection Prevention when a single room is not available.
2. Cohorting patients who have an active infection with or are colonized with the same organism is acceptable.
3. When cohorting, each patient is to be treated as a separate isolation patient. Gowns/gloves are to be changed and hand hygiene completed prior to any contact with the other patient.
4. Prioritize patients for a **single room** who are:
   a. At greater risk for transmission (e.g. draining wounds, stool incontinence, uncontained secretions)
   b. At increased risk of acquisition and adverse outcomes resulting from HAI (e.g. immunosuppression, open wounds/surgical incision, indwelling catheters, anticipated prolonged length of stay, total dependence on healthcare workers for activities of daily living).

Discontinuing Isolation

1. Isolation precautions shall remain in effect until the condition is ruled out or the criteria for duration have been met per Appendix A.
2. Date and time of discontinuation should be documented in the computer system.
3. No patient will be removed from Standard Precautions.
4. No patient will be removed from Contact Precautions if the patient is colonized or infected with an MDRO unless approved by the Infection Preventionist.
5. When the isolated condition is one that may be spread by the **airborne** route, the room must be allowed to sit undisturbed with the door closed for one (1) hour prior to terminal cleaning.

6. EVS will be asked to perform a terminal clean when patients are removed from Contact Precautions for C difficile.
7. Isolation signage is not removed until the room is terminally cleaned.
8. For more detailed information, see Attachment 2: Protocol for Discontinuing Precautions.

Documentation

Isolation is documented in the facility's computer system, including type of isolation, date and time precautions were implemented, as well as patient/family education. Also document when isolation is discontinued.

Please reference the following policies for additional information on isolation precautions:

- Tuberculosis Control Plan (policy IP16 Attachment 1)
- Influenza Guidelines (policy IP10)

Attachment 1: Clinical Syndromes or Conditions Warranting Empiric Precautions Pending Confirmation of Diagnosis – CDC 2007

Attachment 2: Protocol for Discontinuing Precautions

Attachment 3: Interim Guidance for Managing Enhanced Isolation Precautions During Period of Reduced Supply of Personal Protective Equipment

Attachment 4: Guidelines for Imaging for Patient on Enhanced Isolation precautions

References:

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Approvals	***Signature***	***Name***	***Title***	***Date***