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## Isolation Precautions

### I. Description

Describes the CDC-based isolation guidelines used to reduce the transmission of communicable diseases in the health care setting.

### II. Rationale

The spread of communicable disease can be prevented by instituting control measures based upon the route of transmission.

### III. Policy

#### A. Principles of Infection Transmission

Transmission of infection within a hospital requires three elements: a source of infecting microorganisms, a susceptible host, and a means of transmission for the microorganism.

##### 1. Source

Human sources of the infecting microorganisms in hospitals may be patients, Healthcare personnel, or on occasion, visitors, and may include persons with acute disease, persons in the incubation period of a disease, persons who are colonized by an infectious agent but have no apparent disease, or persons who are chronic carriers of an infectious agent. Other sources of infecting microorganisms can be the patient's own endogenous flora (major source for healthcare-associated infections), which may be difficult to control, and inanimate environmental objects that have become contaminated, including equipment and medications.

##### 2. Host

Resistance among persons to pathogenic microorganisms varies greatly. Some persons may be immune to infection or may be able to resist colonization by an infectious agent; others exposed to the same agent may establish a commensal relationship with the infecting microorganism and become asymptomatic carriers; still others may develop clinical disease. Host factors such as age; underlying disease; treatments with antimicrobials, corticosteroids, or other immunosuppressive agents; irradiation; and breaks in the first line of defense mechanisms caused by such factors as surgical operations, anesthesia, and indwelling catheters may render

patients more susceptible to infection.

### 3. Transmission

Microorganisms are transmitted in hospitals by several routes, and the same microorganism may be transmitted by more than one route. There are five main routes of transmission: contact, droplet, airborne, common vehicle, and vector-borne. However, common vehicle and vector-borne transmission do not play a significant role in typical healthcare associated infections

## B. General Guidelines for Isolation Precautions

Maintaining uniform standards of isolation practice within UNC Medical Center is essential to protect patients and those responsible for their care from acquiring communicable diseases.

1. There are three tiers of Isolation Precautions.
  - a. Standard Precautions: designed for the care of all patients, regardless of their diagnosis or presumed infection status and it is the primary strategy for successful healthcare associated Infection Prevention.
  - b. Transmission-based Precautions (Contact, Enteric Contact, Droplet, Airborne, and Special Airborne): designed for patients known or suspected to be infected by epidemiologically important pathogens spread by airborne or droplet transmission or by contact with skin or contaminated surfaces. They may be combined for diseases that have multiple routes of transmission. When used either singularly, or in combination, they are used in addition to Standard Precautions.
  - c. Protective Precautions: Designed for the protection of the immunosuppressed patient whose resistance to infection is impaired due to treatment or disease.
2. Components of Isolations Precautions
  - a. Hand Hygiene: Hand hygiene is frequently considered the single most important measure to reduce the risks of transmitting microorganisms from one person to another or from one site to another on the same patient. Performing hand hygiene as promptly and thoroughly as possible between patient contacts and after contact with blood, body fluids, secretions, excretions, and equipment or articles contaminated by them is an important component of Infection Prevention and isolation precautions. [See Infection Prevention Policy: Hand Hygiene and Use of Antiseptics for Skin Preparation](#) for additional details regarding Hand Hygiene.
  - b. Personal Protective Equipment(PPE):
    - i. Gloves:
      - In addition to hand hygiene, gloves play an important role in reducing the risks of transmission of microorganisms. Wearing gloves does not replace the need for hand hygiene, because gloves may have small, unapparent defects or may be torn during use, and hands can become contaminated during removal of gloves. Failure to change gloves and perform hand hygiene between patient contacts is an Infection Prevention hazard. Gloves are worn for three important reasons in hospitals.

- First, gloves are worn to provide a protective barrier and to prevent gross contamination of the hands when touching blood, body fluids, secretions, excretions, mucous membranes, and non-intact skin. The wearing of gloves in specified circumstances to reduce the risk of exposures to bloodborne pathogens is mandated by the OSHA Bloodborne Pathogens final rule.
- Second, gloves are worn to reduce the likelihood that microorganisms present on the hands of personnel will be transmitted to patients during invasive or other patient-care procedures that involve touching a patient's mucous membranes and non-intact skin.
- Third, gloves are worn to reduce the likelihood that hands of personnel contaminated with microorganisms from a patient or a fomite can transmit these microorganisms to another patient. In this situation, gloves must be changed between patient contacts and hand hygiene performed after gloves are removed.

ii. Gowns and Protective Apparel:

- Gowns are worn to prevent contamination of clothing and to protect the skin of personnel from blood and body fluid exposures. Gowns that are treated to make them impermeable to liquids, leg coverings, boots, or shoe covers provide greater protection to the skin when splashes or large quantities of infective material are present or anticipated. The wearing of gowns and protective apparel under specified circumstances to reduce the risk of exposures to bloodborne pathogens is mandated by the OSHA Bloodborne Pathogens final rule. Gowns are also worn by personnel during the care of patients infected with epidemiologically important microorganisms to reduce the opportunity for transmission of pathogens from patients or items in their environment to other patients or environments. When gowns are worn for this purpose, they are removed before leaving the patient's environment, and hand hygiene performed.

iii. Masks, Respiratory Protection, Eye Protection, and Face Shields:

- Various types of masks, goggles, and face shields are worn alone or in combination to provide barrier protection. A mask that covers both the nose and the mouth, and goggles or a face shield are worn by hospital personnel during procedures and patient-care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions to provide protection of the mucous membranes of the eyes, nose, and mouth from contact transmission of pathogens. The wearing of masks, eye protection, and face shields in specified circumstances to reduce the risk of exposures to bloodborne pathogens is mandated by the OSHA Bloodborne Pathogens final rule. A surgical mask generally is worn by hospital personnel to provide protection against spread of infectious large-particle droplets that are transmitted by close contact and generally travel only short distances (up to 3 ft.) from infected patients who are coughing or sneezing. An N-95 respirator (prior fit testing required) is worn by personnel to provide protection against infectious small-particle droplets ( $< 5 \mu\text{m}$ ) that can remain suspended in the air for long periods of time (e.g., droplet nuclei of *Mycobacterium tuberculosis*).

c. Patient Placement: Appropriate patient placement is a significant component of isolation

precautions. A private room is important to prevent direct- or indirect-contact transmission. A patient with highly transmissible or epidemiologically important microorganisms is placed in a private room with hand hygiene and toilet facilities, to reduce opportunities for transmission of microorganisms. A private room with appropriate air handling and ventilation is particularly important for reducing the risk of transmission of microorganisms from a source patient to susceptible patients and other persons in hospitals when the microorganism is spread by airborne transmission. Refer to the [Infection Prevention Policy Women's Hospital Maternal Units \(3WH, L&D, 5WH, NBN & NCCC\): Recommendations from Infection Prevention Attachment 8](#) for common newborn infectious diseases and placement options.

- d. Education: Patient education is essential to control the transmission of infections. The patient should be instructed to cover all coughs and practice good handwashing. They should not share drinks or food. Every member of the direct healthcare team has the responsibility to observe proper procedures and to teach those individuals coming in contact with the patient who are not familiar with isolation techniques. The patient and their family should also be instructed regarding the need for isolation precautions to promote compliance.
- e. Transport of Infected Patients: Limiting the movement and transport of patients infected with virulent or epidemiologically important microorganisms and ensuring that such patients leave their rooms only for essential purposes reduces opportunities for transmission of microorganisms in hospitals. When patient transport is necessary, it is important that (1) appropriate barriers (e.g., masks, impervious dressings) are worn or used by the patient to reduce the opportunity for transmission of infectious microorganisms to other patients, personnel, and visitors and to reduce contamination of the environment; (2) personnel in the area to which the patient is to be taken are notified of the impending arrival of the patient and of the precautions to be used to reduce the risk of transmission of infectious microorganisms; and, (3) patients are informed of ways by which they can assist in preventing the transmission of their infectious microorganisms to others.
- f. Patient Care Equipment: Contaminated, reusable critical medical devices or patient-care equipment (i.e., equipment that enters normally sterile tissue or through which blood flows) or semi-critical medical devices or patient-care equipment (i.e., equipment that touches mucous membranes) are sterilized or disinfected (reprocessed) after each use to reduce the risk of transmission of microorganisms to other patients; the type of reprocessing is determined by the article, its intended use, and the manufacturer's recommendations. Noncritical equipment (i.e., equipment that touches intact skin) contaminated with blood, body fluids, secretions, or excretions is cleaned and disinfected using an EPA-registered hospital disinfectant (i.e. Metriguard, SaniCloth) after each patient use. [The Infection Prevention Policy: Cleaning, Disinfection, and Sterilization of Patient-Care Items](#) provides detailed guidelines to ensure appropriate disinfection/sterilization of equipment and devices. Only those supplies essential for a patient's care should be kept in the patient's room.
- g. Linen and Laundry: Although soiled linen may be contaminated with pathogenic microorganisms, the risk of disease transmission is negligible if it is handled, transported, and laundered in a manner that avoids transfer of microorganisms to patients, personnel, and environments. All linen should be considered potentially contaminated and handled with Standard Precautions. Isolation linen does not require special bagging. Fluid-resistant bags are used for linen to prevent potential leaking of body fluids through the bags.

- h. Dishes, Glasses, Cups, and Eating Utensils: No special precautions are needed for dishes, glasses, cups, or eating utensils.
- i. Visitors: Visitors may not eat or drink in rooms of patients on Enteric Contact, Airborne or Droplet Precautions. All visitors must be instructed to use proper hand hygiene after leaving an isolation room. They must adhere to all precautions as indicated by the isolation sign on the patient door. Visitors of patients on Contact or Enteric Contact Precautions should be discouraged from visiting in multiple patient rooms. Encourage the family members or visitors to ask personnel for assistance in determining necessary precautions. For Newborn Nursery and NCCC, when primary caregiver is colonized with MRSA, refer to Attachment 9 of the [Infection Prevention Policy: Women's Hospital Maternal Units \(3WH, L&D, 5WH, NBN & NCCC\): Recommendations from Infection Prevention](#).
- j. Patients visiting Patients: Patients who wish to visit other patients in the hospital must have approval from their attending physician and the attending physician of the other patient prior to visitation
- k. Volunteers: Volunteers of any age may not work with patients on Droplet, Airborne or Enteric Precautions (only one exception – trained volunteers for Play Atrium). Volunteers 18 and older may work with patients on Contact Precautions if they have been trained (hospital volunteer orientation or trained by volunteers educated on Contact Precautions e.g., cuddlers). Volunteers under 18 may not work with patients on any isolation precautions including Contact Precautions.
- l. Pregnant and Post Partum Health Care Personnel: Pregnant and post-partum employees may interact with patients who have communicable disease. Personnel should follow the appropriate isolation and/or precaution techniques as indicated. The specific measures required for each disease (mask, gown, gloves, handling of secretions, goggles, etc.) as well as an explanation of the principles of isolation and precaution practices are detailed in this policy. Any questions can be directed to the Department of Infection Prevention at 984-974-7500. For urgent questions after hours contact the Infection Preventionist (IP) directly via pager 919-216-2935.

## C. Initiating Isolation Precautions (Ordering and Signage)

1. Patients with a known or suspected communicable disease (e.g., Influenza, TB, pertussis, invasive meningococcal disease, and Clostridium difficile) should be placed on the appropriate isolation precautions until either disease is ruled out or when diseases is confirmed for the duration as described in Attachment 2.
2. It is the responsibility of the physician to recognize the need for isolation and to order in the electronic medical record the appropriate type of isolation precautions to be followed. The physician may consult with an Infection Preventionist (IP) if desired.
3. When the need is demonstrated, as standard of care, the registered nurse should initiate the indicated isolation precautions and reflect this appropriately in the electronic health record. This documentation ensures all health care professionals and departments providing care or services with the patient are aware of those precautions.

4. The Infection Preventionists in Infection Prevention may enter isolation orders in the electronic medical record without a physician's co-signature. In such cases, the Infection Preventionist will notify the patient's physician and/or nurse of the reason for isolation.
5. Termination of isolation requires a physician's order or the recommendation of Infection Prevention. Infection Prevention should be notified before discontinuing isolation on a patient flagged for a Multi-Drug Resistant Organism (MDRO) in the electronic medical record, even with a physician order.
6. The appropriate Isolation Precaution sign (Special Airborne, Airborne, Droplet, Contact, Enteric-Contact, and Protective) should be placed in a readily visible location outside of the patient's room. The signs should be readily available in all areas where patients requiring isolation are seen. Special Airborne Precaution signs are stored in Infection Prevention. No sign is necessary for Standard Precautions.
7. Personal protective equipment (PPE) (e.g. gowns, gloves, masks) should be readily available outside the patient room either in a cart outside the patient's room door or in a designated cabinet outside the room door.

## **D. Standard Precautions**

1. Use Standard Precautions for the care of all patients.
2. Standard Precautions apply to (1) blood; (2) all body fluids, secretions, and excretions except sweat, regardless of whether or not they contain visible blood; (3) non-intact skin; and (4) mucous membranes. Standard Precautions are designed to reduce the risk of transmission of microorganisms from both recognized and unrecognized sources of infection in hospitals.
3. Principles of Standard Precautions:
  - a. Patient Placement:
    - i. Place a patient who contaminates the environment or who does not (or cannot be expected to) assist in maintaining appropriate hygiene or environmental control in a private room.
  - b. Hand Hygiene:
    - i. Perform hand hygiene after touching blood, body fluids, secretions, excretions, and contaminated items, whether or not gloves are worn.
    - ii. Perform hand hygiene immediately after gloves are removed, between patient contacts, and when otherwise indicated to avoid transfer of microorganisms to other patients or environments.
    - iii. It may be necessary to perform hand hygiene between tasks and procedures on the same patient to prevent cross-contamination of different body sites.
  - c. Personal Protective Equipment:
    - i. Gloves:
      - Wear nitrile gloves when touching blood, body fluids, secretions, excretions, non-intact skin, rashes and contaminated items.



- Put on clean gloves just before touching mucous membranes and nonintact skin.
- Change gloves between tasks and procedures on the same patient after contact with material that may contain a high concentration of microorganisms.
- Remove gloves promptly after use and perform hand hygiene before touching non-contaminated items and environmental surfaces and before going to another patient to avoid transfer of microorganisms to other patients or environmental surfaces.

ii. Mask, Eye Protection, Face Shield:

- Wear a mask and eye protection or a face shield to protect mucous membranes of the eyes, nose, and mouth during procedures and patient-care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, and excretions.

iii. Gowns:

- Wear a gown to protect skin and to prevent soiling of clothing during procedures and patient-care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions.
- Select a gown that is appropriate for the activity and amount of fluid likely to be encountered. Waterproof gowns are available for use (e.g., Sage blue gown). A non-fluid resistant gown (i.e., isolation gown) may be worn in all other procedures not requiring a sterile gown.
- Carefully remove a soiled gown so clothes are not contaminated. Gowns should be removed promptly when no longer needed and should be properly disposed of. Disposable gowns may not be used more than once.

d. Patient Care Equipment

- i. Handle used patient-care equipment soiled with blood, body fluids, secretions, and excretions in a manner that prevents skin and mucous membrane exposures, contamination of clothing, and transfer of microorganisms to other patients and environments.
- ii. Ensure that reusable equipment is not used for the care of another patient until it has been cleaned and reprocessed appropriately.
- iii. Ensure that single use items are discarded properly.

e. Linen:

- i. Handle, transport, and process used linen soiled with blood, body fluids, secretions, and excretions in a manner that prevents skin and mucous membrane exposures and contamination of clothing and that avoids transfer of microorganisms to other patients and environments.

f. Respiratory Hygiene / Cough Etiquette:

- i. Provide surgical masks to all patients with symptoms of a respiratory illness. Provide instructions on the proper use and disposal of masks.

- ii. For patients who cannot wear a surgical mask, provide tissues and instructions on when to use them (i.e., when coughing, sneezing, or controlling nasal secretions), how and where to dispose of them, and the importance of hand hygiene after handling this material.
- iii. Provide hand hygiene materials in waiting room areas, and encourage patients with respiratory symptoms to perform hand hygiene.
- iv. Designate an area in the waiting room where patients with respiratory symptoms can be segregated (ideally by at least 3 feet) from other patients who do not have respiratory symptoms.
- v. Place patients with respiratory symptoms in a private room (preferred) or cubicle as soon as possible for further evaluation.
- vi. Implement use of surgical or procedure masks by health care personnel during the evaluation for patients with respiratory symptoms.
- vii. Consider the installation of plexiglass barriers at the point of triage or registration to protect health care personnel from contact with respiratory droplets.
- viii. If no barriers are present, instruct registration and triage staff to remain at least 3 feet from unmasked patients and to consider wearing surgical masks during respiratory infection season.
- ix. Continue to use Droplet Precautions to manage patients with respiratory symptoms until it is determined that the cause of symptoms is not an infectious agent that requires precautions beyond Standard Precautions.

## **E. Contact Precautions**

1. Use Contact Precautions, in addition to Standard Precautions, for specified patients known or suspected to be infected or colonized with epidemiologically important microorganisms (e.g. MRSA, VRE) that can be transmitted by direct contact with the patient (hand or skin-to-skin contact that occurs when performing patient care activities that require touching the patient's dry skin) or indirect contact (touching) with environmental surfaces or patient care items in the patient's environment. For guidelines regarding care of patients with MDROs in the ambulatory setting refer to Attachment 15: Management of Patients with Multidrug-Resistant Organisms (MDROs) or Epidemiologically-Important Pathogens in Ambulatory Settings.
2. Principles of Contact Precautions:
  - a. Patient Placement:
    - i. Place patient in a private room.
    - ii. For patients requiring Contact Precautions on 4 West and other curtained spaces the following must be implemented:
      - Bed space dividing curtains must remain closed at all times.
      - Patient may not leave the curtained area except for therapeutic purposes (e.g. procedures or tests) and follow Patient Transport guidelines below



- Ideally, the patient will have a bedside commode (if the unit's shared bathroom is used, the bathroom must be cleaned/disinfected prior to use by another patient or staff).
  - Staff should follow contact precautions when in the curtained bed space (i.e. contact precaution sign visible, gown and gloves per policy).
  - Manager or charge nurse should work with Nursing House Supervisor to expedite patient placement into a private inpatient room.
- b. Ideally, CF patients should not be assigned to these areas. All patients with CF should wear a surgical mask when in a healthcare facility to reduce the risk of transmission or acquisition of CF pathogens except during pulmonary function testing, in the clinic exam room, or in a non-curtained patient hospital room.
- c. Hand Hygiene:
- i. All staff will perform strict hand hygiene using an antibacterial product (chlorhexidine gluconate 2%) or an alcohol based hand rub (e.g. Purell) immediately after patient contact and after touching contaminated articles. An alcohol based hand rub is acceptable for use unless the hands are contaminated with proteinaceous material or visibly soiled.
- d. Personal Protective Equipment:
- i. Wear gloves when entering the room.
  - ii. Wear an isolation gown for direct patient care or whenever clothing may contact the surfaces in the room.
  - iii. Phones/pagers should either be left outside of the isolation room, or HCP should remove PPE/perform HH and leave the room before answering the phone or pager (unless phone can be used hands-free under the isolation gown [e.g., Vocera phones]).
  - iv. Before leaving the patient's environment, carefully remove and properly dispose of the gown.
  - v. Yellow isolation gowns are not to be reused.
  - vi. All staff will wear a surgical mask when performing procedures that may generate droplets or aerosolization of infective material (e.g., suctioning, tracheal care, wound irrigation).
  - vii. Perform hand hygiene after removal of PPE.
- e. Patient Transport
- i. Limit the movement and transport of the patient from the room to essential purposes only.
  - ii. If the patient is transported out of the room, ensure that precautions are maintained to minimize the risk of transmission of microorganisms to other patients and contamination of environmental surfaces or equipment.
  - iii. When the patient must be transported to another department, the receiving department

should be notified that the patient is on Contact Precautions.

- iv. The receiving department must manage the patient in a manner to prevent the transmission of the resistant organisms to other patients or personnel. Ideally, patients on Contact Precautions will be seen at the end of the day or in a separate area.
  - v. The stretcher, wheelchair or other equipment used by the patient must be cleaned with an approved disinfectant prior to reuse.
  - vi. For further explanation of transporting patients on isolation precautions, see Attachment 16: Transport of Patients on Isolation.
- f. Patient Care Equipment:
- i. When possible, dedicate the use of noncritical patient-care equipment to a single patient to avoid sharing between patients.
  - ii. If use of common equipment or items is unavoidable, then adequately clean and disinfect them before use for another patient. Refer to [Infection Prevention Policy: Infection Prevention Guidelines for Adult and Pediatric Inpatient Care](#) for guidelines for cleaning commonly shared patient care equipment.
- g. Patient Medications
- i. Medications taken into a patient room that cannot be left at the bedside and must be returned to the medication storage area (i.e. the Pyxis) should be wiped with an EPA-registered hospital disinfectant prior to returning it to the medication storage area. Alternatively, if the disinfectant interferes with the labeling of the medication, the medication may be placed in a clean bag prior to placement in the medication storage area. For a list of medication that can be left at the bedside, refer to [Nursing Policy: Medication Administration](#).
- h. Disposable Patient Care Items
- i. Rooms should be stocked with limited amounts of disposable items such that they will be used within a short period of time.
  - ii. Tape rolls used in a patient room should not be returned to clean supply areas (including drawers in patients' rooms) and should be discarded upon discharge.
  - iii. Supplies should be handled only with clean hands or clean gloves and should be stored in a drawer/cabinet.
  - iv. When a patient on Contact Precautions is transferred from the room or discharged, unused supplies must be discarded and not used if: 1) the item is visibly soiled, wet, or damaged 2) if a packaged item has been opened or the integrity of the package has been compromised.
  - i. Guidelines for Therapeutic Activities with Patients on Contact Precautions (For activity guidelines for patients with Cystic Fibrosis, refer to the [Infection Prevention Policy: Patients with Cystic Fibrosis](#)):
    - i. Patients on Contact Precautions should remain in their rooms for all but essential purposes. As part of their rehabilitation, some patients need to exercise outside of their

rooms.

ii. Patients on Contact Precautions may ambulate outside their rooms only in the unit in which they are housed provided they:

- Don a clean hospital gown, clean clothes, or a clean hospital gown over their clothing prior to leaving the room.
- Perform hand hygiene before leaving their room.
- Are instructed on infection prevention principles, including not touching objects in the environment, environmental surfaces, or other patients.
- Patients must remain only within the unit corridors on the unit in which they are housed and may not enter other common areas, including but not limited to: visitor waiting rooms, nutrition areas, nursing stations, and other patient rooms.
- Patient must not have an active infectious process where secretions/drainage are uncontrolled (i.e., not contained under a clean, occlusive dressing or on an exposed area of the body like the face).
- If the patient leaves the unit, they must be accompanied by healthcare personnel.
- Patients who cannot or will not follow these requirements must be accompanied by trained healthcare personnel when ambulating in the hallway. Pediatric patients unable to follow requirements may be accompanied by a HCP or a family member who is instructed on infection prevention and compliant with requirements. During outbreak situations, Infection Prevention may temporarily suspend these privileges.

iii. If a healthcare provider is accompanying a patient on Contact Precautions:

- The healthcare provider will don gloves, and an isolation gown if anticipating contact with the patient or their environment to enter the Contact Precautions room and prepare the patient for therapy.
- The patient should don a clean hospital gown, clean clothes, or a clean hospital gown over their clothing prior to leaving the room.
- Prior to leaving the room, the patient will perform hand hygiene independently or with assistance.
- The healthcare provider will remove their contaminated gloves, and gown if applicable, and perform hand hygiene.
- The healthcare provider should then don a clean isolation gown and gloves prior to leaving the room.

iv. Dressings should be clean and should contain any wound drainage.

v. The patient should be instructed not to handle any items in the environment. The accompanying healthcare provider should avoid touching items in the environment. If it is necessary for the patient or healthcare personnel to handle items, such as stair rails when walking down stairs, then the caregiver should thoroughly clean these items with an EPA-registered hospital disinfectant as soon as possible. Ideally, cleaning should be done prior to leaving the area; however, if this is not possible, then cleaning will be done

after the patient has been returned to their room.

- vi. After returning the patient to the room, the healthcare worker must remove gown and gloves and perform hand hygiene upon leaving the patient room.
- vii. When the infected site is the respiratory tract, instruct the patient to cough and expectorate into paper tissues. An appropriate receptacle for disposing of tissues must be provided to the patient. When the patient leaves their room, they must be able to manage their respiratory secretions in a manner to prevent droplet spread of organisms. A mask is not required unless necessary to control secretions, or unless a CF patient is on Contact Precautions.
- viii. Patients colonized/infected in the respiratory tract with multiply-antibiotic resistant organisms (e.g., patient with *B. cepacia* or *P. aeruginosa*) will not undergo PT/OT at the same time/room with severely immunocompromised patients (e.g., leukemia or bone marrow transplant).
- ix. Small children are sometimes allowed to sit in a chair or wagon or be held by the nurse outside of their rooms for socialization purposes. This practice is acceptable for children on Contact Precautions, as long as they are accompanied by a therapist or nurse and remain just inside or just outside the doorway to their room, in a location where the Contact Precautions sign is visible. Children on Contact Precautions should not sit in the Nurses' Station.
- x. Adult patients, especially older adults and long term patients are sometimes allowed to sit outside of their rooms for socialization purposes. This is acceptable for patients on Contact Precautions, as long as they remain confined to their chair and remain just inside or just outside the doorway to their room, in a location where the Contact Precautions sign is visible. Patients on Contact Precautions should not sit in the Nurses' Station.
- xi. The patient participating in the Pulmonary Rehabilitation Program in Physical Therapy must be managed utilizing Contact Precautions if indicated. Ideally this patient will be seen at the end of the day or in a separate area
- xii. The patient participating in the Recreation Therapy Program must be managed utilizing the following additional guidelines. You may also refer to the [Infection Prevention Policy: Pediatric Play Facilities and Child Life](#) for more details.
  - The physician should identify the need for Contact Precautions, if indicated, when ordering recreational therapy.
  - The patient may go to the recreation therapy areas (i.e., pediatric playroom) when no other patients are present.
  - The patient may contact only those materials that can be disinfected. These items must be cleaned with an approved disinfectant after use. Additional guidelines for cleaning of toys are provided in the [Infection Prevention Policy: Pediatric Play Facilities and Child Life](#).
- xiii. Patients requiring Contact Precautions may also participate in the Hospital School Program.

- The patient should be instructed to prevent contamination of school materials that are to be reused by other patients (e.g., covers cough, performs hand hygiene prior to using school materials).
- Materials from text books may be used by following one of the Infection Prevention measures:
  - Photo copy the materials needed and give the papers to the patient to keep
  - Discard materials after use if unable to disinfect; or
  - Store contaminated textbooks for 6 months after use to allow time for organisms to die.
  - Items such as books and computer keyboards must be cleaned with an EPA-registered hospital disinfectant prior to reuse by other patients.
  - When possible, these items should be assigned to the patient on Contact Precautions as long as they require the items and then cleaned prior to reuse.
  - These patients should not be instructed in the school room while other patients are present.

xiv. For guidelines regarding patients housed on the Psychiatric units who require Contact Precautions, refer to the [Infection Prevention Policy: Psychiatric Units](#).

j. Volunteers

- i. Volunteers, who have been trained, may work with or visit patients who are on Contact Precautions if they choose to. They must adhere to Contact Precautions and wear a gown and gloves when having contact with the patient or their environment.

k. Visitors

- i. Visitors do not have to wear gown and gloves but are expected to perform hand hygiene as per standard precautions.

### 3. Discontinuing Contact Precautions

- a. To discontinue Contact Precautions, specific criteria for MRSA, VRE, MDR Gram-negative bacilli, MDR-*Acinetobacter* and Carbapenem-resistant *Enterobacteriaceae* must be met as outlined below.

i. **MRSA:**

- Patients who had a positive MRSA culture or MRSA screen **within the past 1 year** must remain on Contact Precautions or contact Infection Prevention for clearance criteria (off antibiotics 72 hours, 3 negative sets).
- Patients with a positive MRSA culture or MRSA screen **1-2 years ago** should be placed on Contact Precautions until they meet **ALL** the following criteria:
  - Patient must be off antibiotics active against MRSA for at least 72 hrs.
  - All signs of active infection at the original site of infection have resolved or the

original site (except blood or healed wound) of infection or colonization is culture negative.

- One MRSA screen set (nares, axillae, wound) taken at least 72 hours off antibiotics active against MRSA is negative.
- Patients who have not had a positive MRSA culture or MRSA screen **in the past 2 years** can be removed from Contact Precautions.
- Also, refer to Attachment 12-13: Policy for removal of Contact Isolation for Patients with MRSA

ii. **VRE:** Refer to Attachment 14: Discontinuing Isolation for Patients with VRE.

iii. **MDR-*Acinetobacter*:**

- Patients who were culture positive for MDR- *Acinetobacter* **within the past 1 year** must remain on Contact Precautions.
- Contact precautions may be discontinued when **ALL** the following criteria are met:
  - **At least 1 year** since a positive culture for a MDR-*Acinetobacter*
  - All signs of active infection at the original site of infection have resolved and the original site of infection or colonization is culture negative for MDR-*Acinetobacter*

iv. **Multidrug-Resistant Gram-negative Bacilli**

- Inpatients with a culture positive for a Multidrug-Resistant Gram-negative Bacilli on the current admission will remain on contact precautions for the duration of admission. For outpatients and readmissions, Contact Precautions may be discontinued when the patient has completed antibiotic therapy for the infection, all signs of infection at the original site of infection have resolved and it has been at least 6 months from the last positive culture for MDR Gram-negative Bacilli.

v. **Carbapenem Resistant *Enterobacteriaceae***

- Patients who were culture positive for Carbapenem Resistant *Enterobacteriaceae* **within the past 1 year** must remain on Contact Precautions.
- Contact precautions may be discontinued when **ALL** the following criteria are met:
  - **At least 1 year** since a positive culture for a Carbapenem Resistant *Enterobacteriaceae*
  - Patient has completed antibiotic therapy for the infection.
  - All signs of active infection at the original site of infection have resolved and the original site (except blood and healed wounds) of infection or colonization is culture negative for Carbapenem Resistant *Enterobacteriaceae*

#### 4. Additional Information

- a. Surveillance culturing of patients and Healthcare Personnel may be conducted as directed by Infection Prevention.

- b. For any patient colonized or infected with vancomycin-resistant *S. aureus* (VRSA) contact Infection Prevention for additional guidelines.

## F. Enteric Contact Precautions

1. In addition to Standard Precautions, use Enteric-Contact Precautions for patients known or suspected to have gastroenteritis caused by *C. difficile*, norovirus, or rotavirus.
2. Principles of Enteric-Contact Precautions
  - a. Patient Placement
    - i. Place the patient in a private room with a private bathroom
  - b. Hand Hygiene
    - i. Enteric Contact Precautions require the use of soap (e.g. 2%CHG) and water for hand hygiene since alcohol is ineffective against these microorganisms.
  - c. Personal Protective Equipment (PPE)
    - i. Wear gloves when entering the room.
    - ii. Wear an isolation gown for direct patient care or whenever clothing may contact surfaces in the room.
    - iii. Phones/pagers should either be left outside of the isolation room, or HCP should remove PPE/perform HH and leave the room before answering the phone or pager (unless phone can be used hands-free under the isolation gown [e.g., Vocera phones]).
    - iv. Before leaving the patient's environment, carefully remove and properly dispose of the gown.
    - v. Yellow isolation gowns are not to be reused.
    - vi. Perform Hand Hygiene with soap and water after removing PPE.
  - d. Patient Transport
    - i. Limit the movement and transport of the patient from the room to essential purposes only.
    - ii. If the patient is transported out of the room, ensure that precautions are maintained to minimize the risk of transmission of microorganisms to other patients and contamination of environmental surfaces or equipment.
    - iii. When the patient must be transported to another department, notify the receiving department that the patient is on Contact Precautions.
    - iv. The receiving department must manage the patient in a manner to prevent the transmission of the resistant organisms to other patients or personnel. Ideally, patients on Enteric-Contact Precautions will be seen at the end of the day or in a separate area.
    - v. The stretcher, wheelchair or other equipment used by the patient must be cleaned with an EPA-registered hospital disinfectant prior to reuse (preferably a bleach wipe).
    - vi. For further explanation of transporting patients on isolation precautions, see Attachment



## 16: Transport of Patients on Isolation.

### e. Patient Care Equipment

- i. When possible, dedicate the use of noncritical patient-care equipment to a single patient to avoid sharing between patients.
- ii. If use of common equipment or items is unavoidable, then adequately clean and disinfect them before use for another patient. Refer [to Infection Prevention Policy: Infection Prevention Guidelines for Adult and Pediatric Inpatient Care](#) for guidelines for cleaning commonly shared patient care equipment.
- iii. For Enteric-Contact Precautions a 1:10 bleach and water solution or Bleach wipe is the preferred cleaning agent for shared equipment.

### f. Patient Medications

- i. Medications taken into a patient room that cannot be left at the bedside and must be returned to the medication storage area (i.e. the Pyxis) should be wiped with an EPA-registered hospital disinfectant prior to returning it to the medication storage area. Alternatively, if the disinfectant interferes with the labeling of the medication, the medication may be placed in a clean bag prior to placement in the medication storage area. For a list of medication that can be left at the bedside, refer to [Nursing Policy: Medication Administration](#).

### g. Disposable Patient Care Items

- i. Rooms should be stocked with limited amounts of disposable items such that they will be used within a short period of time.
- ii. Tape rolls used in a patient room should not be returned to clean supply areas (including drawers in patients' rooms) and should be discarded upon discharge.
- iii. Supplies should be handled only with clean hands or clean gloves and should be stored in a drawer/cabinet.
- iv. When a patient on Enteric-Contact Precautions is transferred from the room or discharged, unused supplies not stored in a drawer/cabinet must be sent with the patient or discarded.

### h. Guidelines for Therapeutic Activities with Patients on Enteric Contact Precautions

- i. Patients on Enteric-Contact Precautions should remain in their rooms for all but essential purposes. As part of their rehabilitation, some patients need to exercise outside of their rooms.
- ii. Patients with *C. difficile* on Enteric-Contact Precautions who have completed their initial 10-14 day *C. difficile* treatment may leave their room for therapeutic purposes, including ambulating outside their rooms on the unit in which they are housed provided they:
  - Are asymptomatic and continent of stool. Diapered infants or children are not considered continent of stool.
  - Don a clean hospital gown, clean clothes, or a clean hospital gown over their clothing prior to leaving the room.

- Perform hand hygiene with soap and water before leaving their room.
  - Are instructed on infection prevention principles, including not touching objects in the environment, environmental surfaces, or other patients.
  - Patients must remain only within the unit corridors on the unit, in which they are housed and may not enter other common areas, including but not limited to: visitor waiting rooms, nutrition areas, nursing stations, and other patient rooms. If the patient leaves the unit, they must be accompanied by healthcare personnel.
  - Patients who cannot or will not follow these requirements must be accompanied by healthcare personnel when ambulating in the hallway. Pediatric patients unable to follow requirements may be accompanied by a HCP or a family member who is instructed on infection prevention and compliant with requirements. During outbreak situations, Infection Prevention may temporarily suspend these privileges.
- iii. Patients with *C. difficile* on Enteric-Contact Precautions who have NOT completed their initial 10-14 day *C. difficile* treatment may ambulate outside their rooms on the units they are housed provided they:
- Are accompanied by a PT/OT therapist or nursing staff.
  - Are asymptomatic and continent of stool. Diapered infants or children are not considered continent of stool.
  - Don a clean hospital gown, clean clothes, or a clean hospital gown over their clothing prior to leaving the room.
  - Perform hand hygiene with soap and water before leaving their room.
  - Are instructed on infection prevention principles, including not touching objects in the environment, environmental surfaces, or other patients.
- iv. If a healthcare provider is accompanying the patient:
- The healthcare provider will don gloves, and an isolation gown if anticipating contact with the patient or their environment to enter the patient room and prepare the patient for therapy. Prior to leaving the room, the patient will wash or have hands washed with assistance using soap and water.
  - The patient should don a clean hospital gown, clean clothing, or a clean hospital gown over their clothing prior to leaving the room. The healthcare provider will remove their contaminated gloves, and gown if applicable, and perform hand hygiene with soap and water. The healthcare provider should then don a clean isolation gown and gloves prior to leaving the room.
  - The patient should be instructed not to handle any items in the environment. The accompanying healthcare provider should avoid touching items in the environment. If it is necessary for the patient or healthcare personnel to handle items, such as stair rails when walking down stairs, then the caregiver should thoroughly clean these items with an EPA-registered hospital disinfectant (preferably a bleach solution or wipe) as soon as possible. Ideally, cleaning should be done prior to leaving the area; however, if this is not possible, then cleaning will be done after

the patient has been returned to their room.

- After returning the patient to the room, the healthcare worker must remove gown and gloves and perform hand hygiene with soap and water upon exiting the patient room.

i. Visitors

- i. Visitors must comply with all Enteric Contact Precautions including the use of gloves when entering the room, use of an isolation gown when they have direct contact with the patient or patient's environment (anything in the patient room, including chairs and sofas), and hand hygiene with soap and water upon exiting the room.

- ii. Visitors may not eat in the rooms of patients on Enteric Contact Precautions

3. Discontinuing Enteric Contact Precautions:

- a. Enteric Contact Precautions for *Clostridium difficile* gastroenteritis can be discontinued 30 days after antibiotic therapy for *C. difficile* is complete. A standard course of antibiotics is considered 10 to 14 days, making the duration of Enteric Precautions 40 to 44 days respectively total; antibiotic tapers are not included in the duration of Enteric Precautions.
- b. Enteric Contact Precautions for Norovirus can be discontinued when the patient has been symptom free for >48hrs.
- c. Enteric Contact Precautions for Rotavirus can be discontinued when the patient is no longer symptomatic and remains asymptomatic for 48 hours.

## G. Droplet Precautions

1. In addition to Standard Precautions, use Droplet Precautions for a patient known or suspected to be infected with microorganisms transmitted by droplets (large-particle droplets larger than 5  $\mu$ m in size that can be generated by the patient during coughing, sneezing, talking, or the performance of procedures such as suctioning or bronchoscopy).
2. Droplet transmission involves contact of the conjunctivae or the mucous membranes of the nose or mouth of a susceptible person with large-particle droplets (larger than 5  $\mu$ m in size) containing microorganisms generated from a person who has a clinical disease or who is a carrier of the microorganism. Transmission via large-particle droplets requires close contact between source and recipient persons, because droplets do not remain suspended in the air and generally travel only short distances, usually 3 ft. or less, through the air.
3. Principles of Droplet Precautions
  - a. Patient Placement
    - i. Place the patient in a private room. Because droplets do not remain suspended in the air, special air handling and ventilation are not required to prevent droplet transmission.
    - ii. For patients requiring Droplet Precautions on 4 West and other curtained spaces the following must be implemented:
      - Patient must be a minimum of 6 feet from other patients (ideally wearing a surgical mask)

- Curtain must remain closed at all times
- Patient may not leave the curtained area except for therapeutic purposes (e.g. procedures or tests) and follow Patient Transport guidelines below
- Ideally the patient will have a bedside commode (if the unit shared bathroom is used, the bathroom must be cleaned/disinfected prior to use by another patient)
- Staff should follow droplet precautions (i.e. droplet precaution sign visible, surgical masks worn when in the patient's curtained bed space, hand hygiene before and after contact with the patient or patient's environment)
- Manager or charge nurse should work with Nursing House Supervisor to expedite patient placement into a private inpatient room

b. Hand Hygiene

- i. Per Standard Precautions

c. Personal Protective Equipment

- i. Wear a surgical mask each time you enter the room. Surgical masks are single use and must be discarded upon exiting the patient room.

d. Patient Transport:

- i. Limit the movement and transport of the patient from the room to essential purposes only.
- ii. If transport or movement is necessary, minimize patient dispersal of droplets by masking the patient, if possible.

e. Visitors

- i. Visitors must wear a surgical mask in the room.
- ii. Visitors may not eat in the room of patients on Droplet Precautions
- iii. If a pediatric patient's primary caregiver(s) desires to "room in" with the patient, they should wear a surgical mask and if indicated, an isolation gown in the patient's room and perform hand hygiene when leaving the room. If the primary caregiver(s) chooses not to conform to the indicated precautions all risks should be explained and documented by a member of the primary physician team (e.g. acquiring infection, spreading infection to other family members). They must be excluded from the hospital if they develop a symptomatic respiratory infection and will be prohibited from having direct contact with other patients (e.g., using pediatric playroom, visiting patients in other hospital rooms).

4. Additional Information:

- a. Patients on Droplet Precautions should not ambulate in the hallways or be in public spaces, even with a mask on.

5. Discontinuing Droplet Precautions

- a. Refer to Attachment 3: Quick Glance for Respiratory Viral Panel Isolation Precautions for

guidelines regarding what type of isolation is needed for each respiratory virus on the panel and when precautions can be discontinued.

## H. Droplet/Contact Precautions

1. In addition to Standard Precautions, use Droplet/Contact Precautions for a patient known or suspected to be infected with microorganisms known to be transmitted by droplets generated by the patient during coughing, sneezing, talking, or the performance of procedures such as suctioning or bronchoscopy and by direct contact with the patient (hand or skin-to-skin contact that occurs when performing patient care activities that require touching the patient's dry skin) or indirect contact (touching) with environmental surfaces or patient care items in the patient's environment.
2. Patient Placement
  - a. Place the patient in a private room. Because droplets do not remain suspended in the air, special air handling and ventilation are not required to prevent droplet transmission.
  - b. For patients requiring Droplet/Contact Precautions on 4 West and other curtained spaces the following must be implemented:
    - i. Patient must be a minimum of 6 feet from other patients (ideally wearing a surgical mask)
    - ii. Curtain must remain closed at all times
    - iii. Patient may not leave the curtained area except for therapeutic purposes (e.g. procedures or tests) and follow Patient Transport guidelines below
    - iv. Ideally the patient will have a bedside commode (if the unit shared bathroom is used, the bathroom must be cleaned/disinfected prior to use by another patient)
    - v. Staff should follow droplet/contact precautions (i.e. droplet/contact precaution sign visible, surgical masks worn when in the patient's curtained bed space, gloves, gown if anticipate direct contact with the patient or patient's environment, hand hygiene before and after contact with the patient or patient's environment)
    - vi. Manager or charge nurse should work with Patient Logistics Center (PLC) to expedite patient placement into a private inpatient room
3. Hand Hygiene
  - a. Per Standard Precautions
4. Personal Protective Equipment
  - a. Wear a surgical mask, isolation gown and gloves each time you enter the room. Surgical masks are single use and must be discarded upon exiting the patient room.
  - b. Either phones/pagers should be left outside of the isolation room, or HCP should remove PPE /perform HH and leave the room before answering the phone or pager (unless phone can be used hands-free under the isolation gown [e.g., Vocera phones]).
  - c. Before leaving the patient's environment, carefully remove and properly dispose of the gown, mask and gloves.

- d. Yellow isolation gowns and surgical masks are not to be reused.
  - e. Perform Hand Hygiene after removing PPE.
- 5. Patient Transport:
  - a. Limit the movement and transport of the patient from the room to essential purposes only.
  - b. Follow policies under both the Droplet and Contact Precautions sections in this policy if patient transport is necessary.
- 6. Visitors
  - a. Visitors must wear a surgical mask, gown and gloves in the room.
  - b. Visitors may not eat in the room of patients on Droplet/Contact Precautions
  - c. If a pediatric patient's primary caregiver(s) desires to "room in" with the patient, they should wear a surgical mask, gloves and an isolation gown in the patient's room and perform hand hygiene when leaving the room. If the primary caregiver(s) chooses not to conform to the indicated precautions all risks should be explained and documented by a member of the primary physician team (e.g. acquiring infection, spreading infection to other family members). They must be excluded from the hospital if they develop a symptomatic respiratory infection and will be prohibited from having direct contact with other patients (e.g., using pediatric playroom, visiting patients in other hospital rooms).
- 7. Additional Information:
  - a. Patients on Droplet/Contact Precautions should not ambulate in the hallways or be in public spaces, even while masked.
- 8. Discontinuing Droplet Precautions
  - a. Refer to Attachment 3: Quick Glance for Respiratory Viral Panel Isolation Precautions for guidelines regarding what type of isolation is needed for each respiratory virus on the panel and when precautions can be discontinued.

## **I. Airborne Precautions**

- 1. In addition to Standard Precautions, use Airborne Precautions for patient known or suspected to be infected with microorganisms transmitted by airborne droplet nuclei (small-particle residue 5  $\mu$ m or smaller in size)(i.e. tuberculosis).
- 2. Airborne transmission occurs by dissemination of either airborne droplet nuclei (small-particle residue [5  $\mu$ m or smaller in size] of evaporated droplets that may remain suspended in the air for long periods of time) or dust particles containing the infectious agent. Microorganisms carried in this manner can be dispersed widely by air currents and may become inhaled by or deposited on a susceptible host within the same room or over a longer distance from the source patient depending on environmental factors.
- 3. Principles of Airborne Precautions
  - a. Patient Placement
    - i. Place the patient in a specially ventilated (negative pressure) private room. Keep the

room door closed and the patient in the room. A complete listing of airborne isolation rooms is available on Infection Prevention's website (click on "[Frequently Requested Information](#)") on the UNC Medical Center Intranet.

- ii. Prior to transferring a patient needing airborne precautions, call ahead to confirm the room is ready and negative pressure has been established with a tissue check. Note: When the room is changed from positive to negative pressure, the room may take about 10 minutes to reach negative pressure.
- iii. Perform a tissue test to assess negative pressure at least daily and document results on the patient record.
- iv. To perform the tissue test: Hold a thin single-ply strip of tissue along the bottom of the door at the corridor. The tissue should be drawn under the door towards the room. If the tissue is blown away from the door or falls straight to the floor, the room is not negative pressure and Maintenance should be notified to correct the problem as soon as possible. While waiting, a HEPA unit should be ordered from Patient Equipment and placed inside the patient's room at the door.

b. Hand Hygiene

- i. Per Standard Precautions

c. Personal Protective Equipment

- i. Wear respiratory protection (N-95 respirator for personnel; surgical mask for visitors) when entering the room of a patient with a known or suspected airborne infectious disease.
- ii. Respirators should not be removed until after exiting the patient room.
- iii. Disposable respirators may be used as long as the respirator continues to pass the fit check and the exterior surface has not become contaminated. Damaged or visibly soiled respirators should be immediately disposed of in a regular waste receptacle.

d. Patient Transport

- i. Limit the movement and transport of the patient from the room to essential purposes only.
- ii. Patients with known or suspected TB must wear a tight-fitting surgical mask. The only exception would be a sedated patient who is being transported on a closed system ventilator or manual ventilation bag with a HEPA filter.

e. Visitors

- i. Patients with known or suspected airborne pathogens will be allowed limited visitors. All visitors must be able to comply with Airborne Precautions. All visitors must wear surgical masks. They should be instructed on use of the surgical mask, as well as Airborne Precaution rooms. This includes 24-hour caregivers (persons without recompense and who are not UNCH employees or volunteers) and other visitors who may stay in adult or pediatric patient rooms for extended periods of time.
- ii. For further information regarding guidelines for primary care givers and household



members of patients <15 years of age with diagnosed or suspected TB refer to the [Infection Prevention Policy: Tuberculosis Control Plan](#).

iii. Visitors may not eat in the room of patients on Airborne Precautions

#### 4. Additional Information

- a. Patients on Airborne Precautions should not ambulate in the hallways or be in public spaces, even with a mask on.
- b. When the patient leaves the Airborne Isolation room, close the room door and leave the Airborne Precautions sign on the door. Ensure the room pressure is set on negative and do not use this room for another patient for at least 30 minutes. Anyone entering the room during that 30-minute time periods should wear the appropriate respiratory protection.

#### 5. Discontinuing Airborne Isolation

- a. For guidelines regarding discontinuation of airborne precautions for TB or suspected TB, refer to [Infection Prevention Policy: Tuberculosis Control Plan](#).
- b. For guidelines regarding discontinuation of airborne precautions for all other airborne diseases, refer to Attachment 1.

## J. Airborne/Contact Precautions

1. In addition to Standard Precautions, use Airborne/Contact Precautions for patient known or suspected to be infected with microorganisms transmitted by airborne droplet nuclei and by direct contact with the patient (hand or skin-to-skin contact that occurs when performing patient care activities that require touching the patient's dry skin) or indirect contact (touching) with environmental surfaces or patient care items in the patient's environment.
2. Patient Placement
  - a. Place the patient in a specially ventilated (negative pressure) private room. Keep the room door closed and the patient in the room. A complete listing of airborne isolation rooms is available on Infection Prevention's website (click on "Frequently Requested Information") on the UNC Medical Center Intranet.
  - b. Prior to transferring a patient needing airborne precautions, call ahead to confirm the room is ready and negative pressure has been established with a tissue test. Note: If the room is changed from positive to negative pressure, the room may take about 10 minutes to reach negative pressure.
  - c. Perform a tissue test to assess negative pressure at least daily and document results on the patient record.
  - d. To perform the tissue test: Hold a thin single-ply strip of tissue along the bottom of the door at the corridor. The tissue should be drawn under the door towards the room. If the tissue is blown away from the door or falls straight to the floor, the room is not negative pressure and Maintenance should be notified to correct the problem as soon as possible. While waiting, a HEPA unit should be ordered from Patient Equipment and placed inside the patient's room at the door.
3. Hand Hygiene

- a. Per Standard Precautions
4. Personal Protective Equipment
- a. Wear respiratory protection (N-95 respirator for personnel; surgical mask for visitors), gloves and a gown when entering the room. Susceptible persons should not enter the room of patients known or suspected to have measles (rubeola) or varicella (chickenpox). **Immune persons should still wear respiratory protection per policy when entering these rooms.**
  - b. Before leaving the patient's environment, carefully remove and properly dispose of the mask and gloves.
  - c. Respirators should not be removed until after exiting the patient room.
  - d. Respirators should be immediately disposed of following each use when the patient is on Airborne/Contact Precautions.
5. Patient Transport
- 1. Limit the movement and transport of the patient from the room to essential purposes only.
  - 2. Patients with known or suspected varicella/chicken pox should wear a tight-fitting surgical mask and be covered from chin to toes with a sheet.
  - 3. Patients with known or suspected varicella zoster/shingles on airborne/contact precautions should have their lesions covered with a sterile dressing unless the lesions are on the face. If the lesions are disseminated, cover the patient with a sheet from chin to toes. A mask is not required.
6. Visitors
- a. All visitors must be able to comply with Airborne/Contact Precautions. All visitors must wear surgical masks, gown and gloves. They should be instructed on use of the surgical mask, as well as Airborne Precaution rooms. This includes 24-hour caregivers (persons without recompense and who are not UNCH employees or volunteers) and other visitors who may stay in adult or pediatric patient rooms for extended periods of time.
  - b. Visitors may not eat in the room of patients on Airborne Precautions.
7. Additional Information
- a. Patients on Airborne/Contact Precautions should not ambulate in the hallways or be in public spaces, even if masked.
  - b. When the patient leaves the Airborne Isolation room, close the room door and leave the Airborne Precautions sign on the door. Ensure the room pressure is set on negative and do not use this room for another patient for at least 30 minutes. Anyone entering the room during that 30-minute time periods should wear the appropriate respiratory protection.
8. Discontinuing Airborne Isolation
- a. For guidelines regarding discontinuation of airborne precautions for airborne diseases, refer to Attachment 1.

## K. Special Airborne Precautions

1. In addition to Standard Precautions, use Special Airborne Precautions for patients known or suspected to be infected with microorganisms transmitted by the airborne route and by contact with mucous membranes of the eyes, nose, and mouth. In particular, use Special Airborne Precautions for patients with known or suspected SARS-CoV infection, smallpox, monkey pox, VHF (e.g., Lassa, Ebola, Marburg, Argentine, Bolivian), and Avian influenza.
2. Refer to the [Infection Prevention Policy: Highly Communicable Respiratory Diseases: Preparedness and Response Plan](#) for specific details. Refer to the [Infection Prevention Policy: Infection Prevention Response to the Intentional Use of a Biothreat Agent](#) for further information on viral hemorrhagic fevers and other possible infectious bioterrorism agents.
3. Principles of Special Airborne Precautions
  - a. Patient Placement
    - i. Place the patient in a specially ventilated (negative pressure) room. Keep the room door closed and the patient in the room. A complete listing of airborne isolation rooms is available on Infection Prevention's website on the UNC Medical Center Intranet.
    - ii. Prior to transferring a patient needing special airborne precautions, call ahead to confirm the room is ready and negative pressure has been established with a tissue check.
    - iii. Perform a tissue test to assess negative pressure at least daily and document results on the patient record. (See Section J. of this policy for instruction on how to perform a tissue test.)
  - b. Hand Hygiene
    - i. Per Standard Precautions
  - c. Personal Protective Equipment
    - i. Wear respiratory protection when entering the room of a patient on Special Airborne Precautions. An N-95 respirator should be worn by personnel. Visitors should use an N-95 respirator if the patient is known/suspected to have SARS-CoV or smallpox.
    - ii. Wear gloves when entering the room (clean, nonsterile gloves are adequate). Perform hand hygiene following the removal of PPE.
    - iii. Wear a gown to enter the room. Use of an isolation gown is adequate if no fluid exposure is anticipated. Use a fluid resistant gown if fluid exposure is anticipated. Perform hand hygiene following the removal of PPE.
    - iv. Wear protective eyewear to enter the room. Goggles must be used for aerosol-generating procedures (e.g., suctioning, wound irrigation, inhalation therapy).
  - d. Patient Transport
    - i. Limit the movement and transport of the patient from room to essential purposes only.
    - ii. If transport or movement is necessary, minimize patient dispersal of droplet nuclei by placing a surgical mask on the patient if possible.

- iii. If the patient must be moved out of the room, consult the Infection Prevention Professional on call (pager 919-216-2935) for advice regarding strategies to prevent exposures during transport.

e. Visitors

- i. Patients with known or suspected pathogens requiring Special -Airborne Precautions will be allowed limited visitors. All visitors must be able to comply with Airborne Precautions. All visitors must wear surgical masks. They should be instructed on use of and N-95 respirator, as well as Airborne Precaution rooms. This includes 24-hour caregivers (persons without recompense and who are not UNCH employees or volunteers) and other visitors who may stay in adult or pediatric patient rooms for extended periods of time

4. Additional Information

- a. Patients on Special Airborne Precautions should not ambulate in the hallways or be in public spaces, even with a mask on.
- b. When the patient leaves the Special Airborne Isolation room, close the room door and leave the Airborne Precautions sign on the door. Ensure the room pressure is set on negative and do not use this room for another patient for at least 30 minutes. Anyone entering the room during that 30-minute time periods should wear the appropriate respiratory protection.

## **L. Protective Precautions**

1. Protective Precautions are designed to protect the patient with impaired resistance to infection. Immunocompromised patients vary in their susceptibility to nosocomial infections, depending on the severity and duration of immunosuppression. Immunosuppression may be due to underlying disease such as HIV and leukemia as well as treatments such as organ transplant and chemotherapy
2. Indications
  - a. Highly recommended for patients with an absolute neutrophil count (ANC) <1000 WBC mm<sup>3</sup>
  - b. Agranulocytosis
  - c. Hematopoietic Stem Cell Transplant (HSCT)
  - d. Lymphomas and leukemia in certain patients (especially in the late stages of Hodgkin's disease and acute leukemia)
  - e. Patients receiving large doses of immunosuppressive drugs, whole body irradiation, or chemotherapy
  - f. Solid organ transplant
3. Principles of Protective Precautions
  - a. Patient Placement
    - i. A private room with positive or neutral air pressure should be used. Ideally, the door should be kept closed. The door may be left open if necessary for patient safety. Positive air pressure rooms are required in the BMTU.

b. Hand Hygiene

- i. Hand hygiene should be performed using an antimicrobial agent (e.g., Chlorhexidine gluconate 2% or Purell) before entering the room, before and after giving patient care, and upon leaving the room.

c. Personal Protective Equipment

- i. Gowns are to be utilized as outlined under standard precautions. Gowns may be required upon entering the room at the discretion of the attending physician.
- ii. Surgical masks are to be utilized as outlined under standard precautions. Surgical masks may be required upon entering the room at the discretion of the attending physician.
- iii. Gloves are to be utilized as outlined under Standard Precautions. Gloves may be required upon entering the room at the discretion of the attending physician

d. Patient Transport

- i. Transportation of the patient should be limited to avoid exposure to any source of infection.
- ii. The nurse or ward secretary will notify the receiving department and patient transportation that the patient requires Protective Precautions. Arrangements must be made so the patient will not have to wait in the holding area of the department.
- iii. Ideally, procedures outside the patient's room are scheduled at the beginning of the day.
- iv. Personnel should ensure that the patient wears a surgical mask (or N-95 respirator at the request of the physician) while out of their room.

e. Guidelines for Therapeutic Activities with Patients on Protective Precautions

- i. The patient should wear a tight fitting surgical mask (or N-95 respirator at the request of the physician) when they leave their room.

4. Additional Information

- a. Personnel, students, volunteers, and visitors with communicable infections such as upper respiratory infections, skin infections, and gastrointestinal infection must not enter the patient's room. An attending physician with mild respiratory symptoms may enter the room wearing a tight-fitting surgical mask. Any other exception to this policy must be approved by the Medical Director of Infection Prevention.
- b. Only essential personnel should enter the patient's room. Visitation by family and friends should be limited to those significant to the patient.
- c. The patient's room requires no special cleaning. Routine housekeeping procedures are followed as outlined in the [Infection Prevention Policy: Environmental Services](#).
- d. No live plants or fresh flowers are allowed in the patient's room.
- e. A neutropenic diet may be ordered at the discretion of the physician. Refer to the [Nursing policy: Neutropenia](#).

## 5. Discontinuing Protective Precautions

- a. Protective Precautions may be rescinded with a written order by the attending physician.

## M. Non-Compliance with Transmission-based Precautions

If a competent patient who must remain on isolation precautions will not stay in their room, notify the patient's attending physician of the patient's refusal to comply with Hospital policy. The attending physician should reinforce the rationale for isolation and the expectation that the patient comply. If the patient continues to be noncompliant, staff should contact Infection Prevention. An Infection Prevention staff member will talk to the patient/family to explain the rationale. If the patient continues to refuse to maintain isolation precautions, Infection Prevention along with the attending physician will determine if the patient needs to be discharged from the hospital for failure to comply with Infection Prevention policy or if the patient needs to be placed on isolation as per Orange County Health Department Health Director.

## IV. References

Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Setting, Centers for Disease Control and Prevention, 2007.

Weber, David J, Rutala, William A: Risks and Prevention of Nosocomial Transmission of Rare Zoonotic Diseases. CID 2001: 32; 446-56.

Management of Multidrug-Resistant Organisms in Healthcare Settings, 2006. Centers for Disease Control and Prevention / HICPAC.

Red Book, American Academy of Pediatrics: 2012 Report of the Committee on Infectious Diseases.

Control of Communicable Diseases Manual, 19th Edition. David L. Hayman, MD, Editor.

## V. Related Policies

[Infection Prevention Policy: Hand Hygiene and Use of Antiseptics for Skin Preparation](#)

[Infection Prevention Policy Environmental Services](#)

[Infection Prevention Policy: Highly Communicable Respiratory Diseases: Preparedness and Response Plan](#)

[Infection Prevention Policy: Infection Prevention Response to the Intentional Use of a Biothreat Agent](#)

[Infection Prevention Policy: Tuberculosis Control Plan.](#)

[Infection Prevention Policy: Infection Prevention Guidelines for Adult and Pediatric Inpatient Care](#)

[Infection Prevention Policy: Psychiatric Units](#)

[Nursing Policy: Medication Administration.](#)

[Nursing policy: Neutropenia](#)

## Attachments:

01: Type and Duration of Precautions  
Recommended for Selected Infections and  
Conditions

02: Isolation Precautions Quick Reference  
 03: Quick Glance for Respiratory Virus Panel Isolation Precautions\*  
 04: Definition of Multi-Drug Resistant Pathogens Requiring Contact Isolation  
 05: Management of Herpes Zoster (Shingles)  
 06: Management of Patients with Suspected Viral Hemorrhagic Fevers (VHFs) Due to Marburg, Ebola, Crimean-Congo Hemorrhagic, and Lassa Fever Viruses  
 07: Isolation Guidelines for Vaccinia Recipients and Patients with Known or Suspected Smallpox  
 08: Expanded Infection Control Precautions for Adverse Events with Increased Potential for Contact with Vaccinia Virus  
 09: Sequence for Removing Personal Protective Equipment (PPE)  
 10: Known MDRO Positive Visitor of Patients in the Hospital  
 11: Infection Control Recommendations for Multiple Patients/Healthcare Personnel with Signs/Symptoms of Gastroenteritis  
 12: Policy for Removal of Contact Isolation for Patients with MRSA  
 13: Protocol for Obtaining MRSA Surveillance Swabs  
 14: Discontinuing Isolation for Patients with VRE  
 15: Management of Patients with Multidrug-Resistant Organisms (MDROs) or Epidemiologically-Important Pathogens in Ambulatory Settings  
 16: Transport of Patients  
 17: Herpes Simplex

## Approval Signatures

Step Description	Approver	Date
Policy Stat Administrator	Patricia Ness: Clin Nurse Education Spec	08/2019
	Thomas Ivester: CMO/VP Medical Affairs	08/2019
	Emily Vavalle: Director, Epidemiology	07/2019
	Sherie Goldbach: Infection Prevention Registrar	07/2019



## Applicability

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