

Status **Active** PolicyStat ID **15384203**



Origination 08/2005
Last Approved 03/2024
Effective 03/2024
Last Revised 03/2024
Next Review 03/2027

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Applicability UNC Medical Center

Isolation Precautions

I. Description

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

II. Policy

A. General Guidelines for Isolation Precautions

Maintaining uniform standards of isolation practice within UNC Hospitals is essential to protect patients and staff 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. It is the primary strategy for successful healthcare associated infection prevention.
 - b. Transmission-based Precautions (Contact, Enteric, Droplet, Airborne, Special Airborne-Contact, and Special Airborne): designed for patients known or suspected to be infected by multidrug-resistant organisms and/or certain 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. 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:**

- 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 the 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:
 - 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.
 - Reduce the likelihood that microorganisms present on the hands of staff will be transmitted to patients during invasive or other patient-care procedures that involve touching a patient's mucous membranes and non-intact skin.
 - Reduce the likelihood that staff hands are 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 staff from blood and body fluid exposures. Fluid impermeable gowns, 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 OSHA Bloodborne Pathogens final rule mandates wearing gown and protective apparel under specific circumstances to reduce the risk of exposure to bloodborne pathogens. Gowns are also worn by staff during the care of patients infected with multidrug-resistant organisms and certain pathogens to reduce the opportunity for transmission of pathogens from patients or items in their environment to other patients or environments. Gown and gloves must be 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, eye protection, and face shields are worn alone or in combination to provide barrier protection. The OSHA Bloodborne Pathogens final rule mandates wearing masks, eye protection, and face shields in specified circumstances to reduce the risk of exposures to bloodborne pathogens.
- A mask that covers both the nose and the mouth, and goggles, eye protection, or a face shield are worn by staff 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.
- A surgical mask generally is worn by staff 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. Surgical

masks used to care for a patient on isolation are a single use, single patient encounter item. Surgical masks should not be worn from patient room to patient room when used as PPE. When used as source control (i.e., for universal pandemic precautions), masks may be worn room to room until soiled or unless worn in an isolation patient's room. Masks must then be discarded, and a new mask donned.

- A respirator is worn by staff to provide protection against infectious small-particle droplets (< 5 µm) that can remain suspended in the air for long periods of time (e.g., droplet nuclei of *Mycobacterium tuberculosis*).

iv. Staff must use PPE provided by the UNC Hospitals during work hours. PPE should not be brought from home/outside locations for use at work as this may put patients at serious risk (e.g., latex anaphylaxis). UNC Hospitals system PPE has been through a review process and meets OSHA guidelines for protection of staff. If staff feel they cannot wear UNC Hospitals provided PPE for any reason (allergy, improper fit, etc.) the staff should work with Occupational Health and/or Environmental Health & Safety to find appropriate PPE.

c. Patient Placement: A private room is important to prevent direct- or indirect-contact transmission. A patient with highly transmissible multidrug-resistant organisms is placed in a private room and ideally with private toilet facilities. 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 \(3WH, L&D, 5WH, NBN & NCCC\): Attachment 4: Isolation Guidelines for Infants and Mothers with Infectious Diseases](#) 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:** Patients on isolation precautions should leave their rooms for essential purposes only (e.g., testing, procedures). Limiting the movement and transport of patients infected with multidrug-resistant organisms and certain pathogens reduces opportunities for transmission of microorganisms in hospitals. When patient transport is necessary, it is important that (1) staff 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 (2) patients are informed of ways by which they can assist in preventing the transmission of their infectious microorganisms to others. Refer to the specific isolation type for instructions on transporting patients on isolation.
- f. **Patient Care Equipment:** Patient equipment that goes into isolation rooms must be cleaned after each patient use. Only those supplies essential for a patient's care should be kept in the patient's room.
- g. **Clinic exam rooms** should be wiped with an EPA-registered disinfectant after a patient on isolation precautions is seen.
- h. **Linen and Laundry:** 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.
- i. **Custody officers** are required to follow UNC Hospitals isolation precautions while in the forensic patient's room. In the event the forensic patient is placed on airborne precautions, all custody officers will be required to wear an N95 respirator.
- j. **Visitors:** All visitors must be instructed to use proper hand hygiene after leaving an isolation room. Personal Protective Equipment (PPE) is encouraged to be used by visitors of patients on isolation precautions and may be required under certain circumstances. Visitors of patients on Isolation Precautions should be discouraged from visiting in multiple patient rooms. Visitors of patients on Isolation Precautions should refrain from eating and drinking in the room.
- k. **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. Both attending physicians should be aware of the infection status of each patient.
- l. **Volunteers:**

- i. Volunteers under 18 may not work with patients on any isolation precautions including Contact Precautions.
 - ii. Volunteers of any age may not work with patients on Airborne, Airborne/Contact, or Special Airborne/Contact Precautions.
 - iii. 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).
 - iv. Volunteers ≥ 18 years of age volunteering in the Children's Hospital, 4 Oncology, inpatient hospice, or with Compassionate Companions can work with patients on Droplet, Droplet/Contact, and Enteric if they have been trained.
- m. Pregnant and post-partum staff: Pregnant and post-partum employees may interact with patients who have communicable disease. Staff should follow the appropriate isolation and/or precaution techniques as indicated.
- n. Initiating Isolation Precautions (Ordering and Signage)
- i. Patients with a known or suspected communicable disease (e.g., Influenza, TB, pertussis, invasive meningococcal disease, and *Clostridioides difficile*, etc.) should be placed on the appropriate isolation precautions until either the disease is ruled out or disease is confirmed for the duration as described in [Attachment 1 – Type and Duration of Precautions Recommended for Selected Infections and Conditions](#).
 - ii. It is the responsibility of the licensed practitioner to recognize the need for isolation and to order the appropriate type of isolation precautions in the electronic medical record. The licensed practitioner may consult with an Infection Preventionist (IP) if desired.
 - iii. When the need is demonstrated, a registered nurse can initiate the indicated isolation precautions and reflect this appropriately in the electronic medical record. This documentation ensures all staff and departments providing care or services with the patient are aware of those precautions.
 - iv. The Infection Preventionists may enter isolation orders in the electronic medical record without a licensed practitioner's co-signature.
 - v. Termination of isolation requires a licensed practitioner'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 licensed practitioner's order.

- vi. The appropriate Isolation Precaution sign 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 and are available in the Infection Prevention policy: [High Consequence Pathogens: Preparedness and Response Plan](#). No sign is necessary for Standard Precautions.
- vii. 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.

B. 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:
 - 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. 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 non-intact 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.
- Implement use of surgical masks by staff during the evaluation for patients with respiratory symptoms.

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. Use a fluid impermeable gown if needed.
- Carefully remove a soiled gown so clothes are not contaminated. Gowns should be removed promptly when no longer needed and should be properly disposed. 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 or reprocessed appropriately.
- iii. Ensure that single use items are discarded properly.

e. Linen:

- 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.

C. Contact Precautions

1. Use Contact Precautions, in addition to Standard Precautions, for patients known or suspected infection or colonization that represent an increased risk for contact transmission. For specific recommendations on using Contact Precautions with multidrug-resistant organisms (MDRO), refer to [Attachment 1 - Type and Duration of Precaution Recommendations for Selected Infections and Conditions](#).

- There are few data on the risk of multidrug-resistant organism (MDRO) transmission in the ambulatory setting. In most cases, adherence to Standard Precautions is sufficient to prevent cross-transmission. Due to the concern for cross-transmission of MDRO, some UNC Hospitals outpatient care clinics choose to follow Contact Precautions colonized/infected with MDRO.
 - Some diagnostic and treatment areas (e.g., GI Procedures, Interventional Radiology) see both inpatients and outpatients. In these areas, staff should follow Contact Precautions for inpatients when indicated.

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.

- 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, charge nurse, and the Patient Logistics Center should work to expedite patient placement into a private room.
- 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.

b. Hand Hygiene:

- All staff will perform 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 visibly soiled.

c. Personal Protective Equipment:

- i. Wear gloves when entering the room.
- ii. Wear an isolation gown for direct patient care, or whenever your body or clothing may contact the surfaces in the room.
- iii. Staff should remove PPE, perform Hand Hygiene and leave the room before answering a phone or pager (unless device can be used hands-free under the isolation gown [e.g., Vocera device]).
- iv. Disposable gowns (e.g., yellow isolation gowns) are not to be reused.
- v. 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).
- vi. Carefully remove and dispose of PPE before leaving the patient's environment.

vii. Perform hand hygiene after removal of 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, 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 staff. 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 12: Transport of Patients on Isolation Precautions](#).

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 clean and disinfect them before use for another patient. Refer to Infection Prevention policy: [Cleaning and Disinfection of Non-Critical Items](#) for guidelines for cleaning commonly shared patient care equipment.

f. Patient Medications

- 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 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 Patient Care 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. Supplies should be handled only with clean hands or clean gloves and should be stored in a drawer/cabinet.
- iii. 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) a packaged item has been opened or the integrity of the package has been compromised.
- iv. 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.

h. 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.
 - Remain only within the unit in which they are housed and do not enter other common areas, including but not limited to: visitor waiting rooms, nutrition areas, nursing stations, and other patient rooms.
 - Do 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 a staff member.
- Patients who cannot or will not follow these requirements must be accompanied by trained staff when ambulating in the hallway. Pediatric patients unable to follow requirements may be accompanied by staff 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 staff are accompanying a patient on Contact Precautions:

- Staff 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.
- Staff will remove their contaminated gloves (and gown if applicable) and perform hand hygiene.
- Staff should then don a clean isolation gown and gloves prior to leaving the room if physical contact with the patient is anticipated. If no physical contact is anticipated, no PPE is necessary.

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. Accompanying staff should avoid touching items in the environment. If it is necessary for the patient or staff to handle items, such as stair rails when walking downstairs, then the caregiver should thoroughly clean these items with an EPA-registered 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. 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, unless a CF patient is on Contact Precautions, or unless masking is in effect as a mitigation measure (i.e., universal pandemic precautions).

- vii. Patients colonized/infected in the respiratory tract with multi-drug resistant organisms will not undergo PT/OT at the same time/ room with severely immunocompromised patients (e.g., leukemia or bone marrow transplant).
- viii. Small children are sometimes allowed to sit in a chair or wagon or are 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, nurse, or staff 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.
- ix. 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.
- x. 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.
- xi. A patient on Contact Precautions participating in the Recreation Therapy Program must be managed using the following additional guidelines:
 - The licensed practitioner 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: [Diversional Supplies \(e.g., toys and books\)](#).

xii. 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).
- For details on materials from textbooks, see the Infection Prevention policy: [Diversional Supplies \(e.g., toys and books\)](#). Materials from textbooks may be used by following one of the Infection Prevention measures:
 - These patients should not be instructed in the schoolroom while other patients are present.

i. Visitors

- i. Visitors do not have to wear gown and gloves. Visitors must perform hand hygiene as per standard precautions.
- ii. Visitors to patients on Contact Precautions for highly resistant MDRO (e.g., certain CRE) may be asked to wear gown and gloves at the discretion of Infection Prevention and unit leadership.

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. Contact Infection Prevention to discontinue isolation if all criteria are met.

i. **MRSA:**

- Contact Precautions for MRSA are required for the duration of the admission in which MRSA is diagnosed.
 - Patient transferred from an outside facility with a new MRSA diagnosis will remain on Contact Precautions for the duration of their admission at UNC Hospitals.
 - Infants transferred to the Neonatal Critical Care Center (NCCC) who are positive for MRSA will remain on Contact Precautions for the duration of their admission.

- See [Attachment 9 - Removal of Contact Precautions for Patients with MRSA with Prolonged Hospitalizations](#), for guidance on removing Contact Precautions in the event of prolonged hospitalization.

ii. **VRE:**

- Contact Precautions for VRE are required for the duration of the admission in which VRE is diagnosed.
 - Patients transferred from an outside facility with a new VRE diagnosis will remain on Contact Precautions for the duration of their admission at UNC Hospitals.
 - BMT patients positive for VRE in pre-HSCT work-up will remain on Contact Precautions for the duration of the HSCT visit following the positive VRE screen.
 - See [Attachment 11 - Removal of Contact Precautions for Patients with VRE with Prolonged Hospitalizations](#), for guidance on removing Contact Precautions in the event of a prolonged hospitalization.

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 an MDR-Acinetobacter
 - All signs of active infection at the original site of infection have resolved or 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 all the following are met:
 - the patient has completed antibiotic therapy for the infection
 - all signs of infection at the original site of infection have resolved
 - it has been at least 6 months from the last positive culture for MDR Gram-negative Bacilli.

v. **Carbapenem Resistant *Enterobacteriaceae* (CRE)**

- Patients who were culture positive for CRE within the last year will remain on contact precautions.
- Removal of contact precautions after 1 year will be considered on a case-by-case basis by Infection Prevention.

4. Additional Information

- a. Surveillance culturing of patients and staff 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.

D. Enteric Precautions

1. In addition to Standard Precautions, use Enteric Precautions for patients known or suspected to have gastroenteritis caused by *C. difficile*, norovirus, rotavirus, or patients identified with a *Candida auris* infection.
2. Principles of Enteric Precautions
 - a. Patient Placement
 - Place the patient in a private room with a private bathroom.
 - b. Hand Hygiene
 - Enteric 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 your body or clothing may contact surfaces in the room.
- iii. Staff should remove PPE, perform Hand Hygiene and leave the room before answering a phone or pager (unless device can be used hands-free under the isolation gown [e.g., Vocera device]).
- iv. Before leaving the patient's environment, carefully remove and properly dispose of PPE.
- v. 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 Enteric Precautions.
- iv. The receiving department must manage the patient in a manner to prevent the transmission of the resistant organisms to other patients or staff. Ideally, patients on Enteric 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 disinfectant prior to reuse (preferably a bleach wipe).
- vi. For further explanation of transporting patients on isolation precautions, see [Attachment 10: Transport of Patients on Isolation Precautions](#).

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: [Cleaning and Disinfection of Non-Critical Items](#) for guidelines for cleaning commonly shared patient care equipment.

- iii. For Enteric Precautions sporicidal cleaning agents (e.g., bleach Sani-cloths) are preferred for cleaning shared equipment.

f. Patient Medications

- 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 a sporicidal cleaning agent (e.g., bleach Sani-cloth) 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 Patient Care 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. Supplies should be handled only with clean hands or clean gloves and should be stored in a drawer/cabinet.
- iii. When a patient on Enteric Precautions is transferred from the room or discharged, unused supplies not stored in a drawer/ cabinet must be sent with the patient or discarded.
- iv. 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.

h. Guidelines for Therapeutic Activities with Patients on Enteric Precautions

- i. Patients on Enteric 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 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, children, or adults 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.
- Remain only within the unit in which they are housed and do 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 a staff member.
- Patients who cannot or will not follow these requirements must be accompanied by staff when ambulating in the hallway. Pediatric patients unable to follow requirements may be accompanied by staff 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 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, children, or adults 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,

environment 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 if physical contact with the patient is anticipated. If no physical contact is anticipated, no PPE is necessary.
- 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 staff to handle items, such as stair rails when walking downstairs, then the caregiver should thoroughly clean these items with an EPA-registered 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 should be encouraged to follow Enteric Precautions while in the patient room 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).

- ii. Hand washing with soap and water upon exiting the room of patient on Enteric Precautions is required.
- iii. Visitors should not eat in the rooms of patients on Enteric Precautions
- iv. Visitors to patients on Enteric Precautions for highly resistant MDRO (e.g., *Candida auris*) may be asked to wear gown and gloves at the discretion of Infection Prevention and unit leadership.

3. Discontinuing Enteric Precautions:

- a. Enteric Precautions for *Clostridioides 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 total; antibiotic tapers are not included in the duration of Enteric Precautions.
 - For patients with a PCR positive *C. difficile*, but EIA is indeterminate (toxin negative) AND the patient is not being treated for *C. difficile* infection (patient is suspected of being colonized and have an alternative cause for diarrhea), enteric precautions will remain active for at least 48 hours after diarrhea has resolved.
- b. Enteric Precautions for Norovirus or Rotavirus can be discontinued when the patient has been symptom free for >48hrs.

E. 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 μm in size that can be generated by the patient during coughing, sneezing, talking, or the performance of procedures such as suctioning or bronchoscopy). 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.
2. 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 in 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 must 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 patients curtained bed space, hand hygiene before and after contact with the patient or patient's environment)
 - Manager or charge nurse should work with Patient Logistics Center (PLC) to expedite patient placement into a private inpatient room.

b. Hand Hygiene

- Per Standard Precautions

c. Personal Protective Equipment

- 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:

- Limit the movement and transport of the patient from the room to essential purposes only.
- If transport or movement is necessary, minimize patient dispersal of droplets by masking the patient, if possible. Mechanically ventilated patients should be transported using a closed system ventilator or manual ventilation bag with a HEPA filter.

e. Visitors

- Visitors should be encouraged to follow Droplet Precautions while in the patient room including wearing a surgical mask in the room.

- ii. If a pediatric patient's primary caregiver(s) desires to "room in" with the patient, they should be educated about PPE available to them to reduce their risk specifically to acquiring the infection, spreading the infection, and spreading the infection to other family members. They should be encouraged to wear a surgical mask and if indicated, an isolation gown in the patient's room.
- iii. Hand hygiene should be performed when entering and leaving the patient's room.

3. Additional Information:

- a. Patients on Droplet Precautions should not ambulate in the hallways or be in public spaces, even with a mask on.
- b. For non-emergent visits in the outpatient setting, consider scheduling patients on Droplet Precautions at the end of the day or rescheduling the patient when no longer infectious.

4. Discontinuing Droplet Precautions

- Refer to [Attachment 2: Quick Glance for Respiratory Panel Isolation Precautions](#) for guidelines regarding what type of isolation is needed for each respiratory virus/pathogen on the panel and when precautions can be discontinued.

F. Droplet/Contact Precautions

1. In addition to Standard Precautions, use Droplet/Contact Precautions for a patient known or suspected to be infected with certain bacteria and viruses spread by droplets and contact. Refer to [Attachment 1 – Type and Duration of Precautions Recommended for Selected Infections and Conditions](#), for selection of the appropriate isolation.
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 in 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. Manager or charge nurse should work with Patient Logistics Center (PLC) to expedite patient placement into a private inpatient room.

3. Hand Hygiene

- 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. Staff should remove PPE, perform Hand Hygiene and leave the room before answering a phone or pager (unless device can be used hands-free under the isolation gown [e.g., Vocera device]).
- c. Before leaving the patient's environment, carefully remove and properly dispose of the gown, mask and gloves. These PPE items are single use.
- d. 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 should be encouraged to follow Droplet and Contact Precautions while in the patient room including the use of surgical mask, gown, and gloves.
- b. If a pediatric patient's primary caregiver(s) desires to "room in" with the patient, they should be educated about PPE available to them to reduce their risk specifically to acquiring the infection, spreading the infection, and spreading the infection to other family members. They should be encouraged to wear a surgical mask, gloves, and an isolation gown in the patient room.

- c. Hand hygiene must be performed when entering and leaving the patient room.

7. Additional Information:

- a. Patients on Droplet/Contact Precautions should not ambulate in the hallways or be in public spaces, even while masked.
- b. For non-emergent visits in the outpatient setting, consider scheduling patients on Droplet Precautions at the end of the day or rescheduling the patient when no longer infectious.

8. Discontinuing Droplet Precautions

- Refer to [Attachment 2: Quick Glance for Respiratory Panel Isolation Precautions](#) for guidelines regarding what type of isolation is needed for each respiratory virus/pathogen on the panel and when precautions can be discontinued.

G. Airborne Precautions

1. In addition to Standard Precautions, use Airborne Precautions for patients known or suspected to be infected with microorganisms transmitted by airborne droplet nuclei (small-particle residue 5 μm or smaller in size) (e.g., tuberculosis). Airborne droplet nuclei can be dispersed widely by air currents and may be inhaled by a susceptible host in the same room, or over a longer distance depending on environmental factors.

2. Principles of Airborne Precautions

- Patient Placement
 - i. Place the patient in an Airborne Infection Isolation Room (AIIR) with negative pressure and out-exhausted ventilation. Keep the room door closed and the patient in the room. A complete [listing of AIIRs](#) is available on Infection Prevention's website.
 - ii. If an AIIR is not immediately available, place a HEPA filter in the patient's room near the door.
 - iii. 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: When the room is changed from positive to negative pressure, the room may take about 10 minutes to reach negative pressure.
 - iv. Perform a tissue test to assess negative pressure at least daily and document results on the patient record. The process for performing a tissue test is as follows:

- From outside of the patient's room (i.e., corridor, anteroom), hold a thin single-ply strip of tissue along the bottom of the patient door. The tissue should be drawn under the door towards the patient room. If the tissue is blown away from the door or falls straight to the floor, the room is not negative pressure and Plant Engineering should be notified to correct the problem as soon as possible. While waiting for Maintenance, a HEPA unit should be ordered from Patient Equipment and placed inside the patient's room at the door.

3. Hand Hygiene

- Per Standard Precautions

4. Personal Protective Equipment

- a. Wear respiratory protection (N95 respirator or PAPR for staff; surgical mask for visitors) when entering the room of a patient with a known or suspected airborne infectious disease.
- b. Respirators should not be removed until after exiting the patient room.
- c. N95 respirators are single use and should be disposed of in a regular waste receptacle upon exiting the patient room.

5. Patient Transport

- a. Limit the movement and transport of the patient from the room to essential purposes only.
- b. Patients with known or suspected TB must wear a tight-fitting surgical mask. Mechanically ventilated patients should be transported using a closed system ventilator or manual ventilation bag with a HEPA filter.

6. Visitors

- a. 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 and are given the option to wear an N95. They should be instructed on use of the surgical mask or on how perform a user seal check for the N95, as well as Airborne Precaution rooms. This includes 24-hour caregivers (persons without recompense and who are not UNC Hospitals employees or volunteers) and other visitors who may stay in adult or pediatric patient rooms for extended periods.
- b. 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](#).

- c. Visitors should not eat in the room of patients on Airborne Precautions.
- d. When a patient from a prison is on Airborne Precautions, the accompanying Department of Corrections personnel will wear a respirator while they are present in the patient's room. Fit testing is the responsibility of the Department of Corrections.

7. 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 period should wear the appropriate respiratory protection.

8. 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 - Type and Duration of Precautions Recommended for Selected Infections and Conditions](#).

9. Airborne Isolation in the Outpatient Setting

- a. Patients requiring airborne isolation should have appointments rescheduled until they are no longer considered contagious or should be seen in clinic areas with AIIRs. If this is not medically feasible, patients with suspected airborne infections should be seen at the end of the day when no other patients are in the clinic.
- b. For clinics not equipped with AIIR:
 - i. Give the patient a surgical mask and instruct them to keep their mask on.
 - ii. Place patient in an exam room with the door closed as soon as possible.
 - iii. Staff will wear N95 respirators, if available and fit-tested, when entering the exam room. If not available or not fit-tested, a tightly fitted surgical mask should be worn.

- iv. For clinics with AIIR available, perform tissue test before and when placing a patient in the room. If not functioning, call Infection Prevention and building maintenance to assess.
 - v. Refer to the [Airborne Isolation Rooms List](#) for the most recent listing of areas that have AIIRs.
- c. Patients requiring Airborne Precautions waiting for an inpatient bed should not wait in the admitting office but be placed in the appropriate AIIR or private room if AIIR not available, in clinic until a bed becomes available. If the clinic is closed, the patient should be sent to the ED to wait for admittance.
- d. Please refer to the Infection Prevention policy: [Tuberculosis Control Plan](#) for full details regarding TB control.
- e. Post outpatient visit
- i. After the patient leaves the clinic, keep the exam door closed for 3 ½ hours if the room is *NOT* an AIIR. If a HEPA filter has been utilized during the visit, the room should only be closed for 30 minutes after the patient leaves.
 - ii. AIIRs should be kept closed for 30 minutes after the patient leaves.
 - iii. After the appropriate “closed” time has elapsed, clean all surfaces with an EPA-registered disinfectant before using the room for another patient.

10. Airborne Isolation in the OR

- a. Elective operative procedures on patients requiring Airborne Isolation should be delayed until the patient is no longer infectious.
- b. When emergency cases must be performed:
 - i. The patient must go directly into an operating room. If the operating room is not ready to receive the patient, the patient must be placed in an Airborne Isolation room in PACU.
 - ii. The doors to the operating room should be closed during the case.
 - iii. Traffic in and out of the room should be kept to a minimum.
 - iv. Attempts should be made to perform the procedure at a time when other patients are not present in the operative suite (i.e., end of day) and when a minimum number of personnel are present.
 - v. Staff present when operative procedures are performed should

wear an N95 respirator rather than a standard surgical mask.

- vi. The anesthesia machine should be equipped with a disposable anesthesia filter.
- vii. Portable HEPA units will be used in the Operating Room (ideally, one HEPA unit at the patient's head and another HEPA unit at the entrance to the OR room).
- viii. Before the patient is transported from the OR, OR staff will contact PACU to confirm the Airborne Isolation Room is ready and the negative pressure has been established with a tissue check. When the patient leaves PACU, close the door and do not use the room for another patient for at least 30 minutes. The receiving inpatient area should be notified that the patient requires an Airborne Isolation Room.

NOTE: When the room is changed from a positive to negative pressure, the room may take 10 minutes to reach negative pressure.
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H. 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 or contact with environmental surfaces or patient care items in the patient's environment.
2. Principles of Airborne/Contact Precautions
 - a. Patient Placement
 - i. Place the patient in an Airborne Infection Isolation Room (AIIR) with negative pressure and out-exhausted ventilation. Keep the room door closed and the patient in the room. A complete [listing of AIIRs](#) is available on Infection Prevention's website on the UNC Hospitals Intranet.
 - ii. If an AIIR is not immediately available, place a HEPA filter in the patient's room near the door.
 - iii. 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.
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- iv. Perform a tissue test to assess negative pressure at least daily and document results on the patient record. The process for performing a tissue test is as follows:
 - From outside of the patient's room (i.e., corridor, anteroom), hold a thin single-ply strip of tissue along the bottom of the patient room door. The tissue should be drawn under the door towards the patient room. If the tissue is blown away from the door or falls straight to the floor, the room is not negative pressure and Plant Engineering 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

- Per Standard Precautions

c. Personal Protective Equipment

- i. Wear respiratory protection (N95 respirator for PAPR for fit tested staff), 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 when entering these rooms.**
- ii. Before leaving the patient's environment, carefully remove and properly dispose of the gown and gloves.
- iii. Respirators should be removed **after** exiting the patient room.
- iv. Respirators should be immediately disposed of following each use.

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 varicella/chicken pox should wear a tight-fitting surgical mask and be covered from chin to toes with a sheet. Mechanically ventilated patients should be transported using a closed system ventilator or manual ventilation bag with a HEPA filter.
- iii. 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.

e. Visitors

- i. All visitors must be able to comply with Airborne/Contact Precautions. All visitors must wear surgical masks or N95, 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 UNC Hospitals employees or volunteers) and other visitors who may stay in adult or pediatric patient rooms for extended periods of time.
- ii. Visitors should not eat in the room of patients on Airborne/Contact Precautions.
- iii. When a patient from a prison is on Airborne/Contact Precautions, in addition to gown and gloves, the accompanying Department of Corrections personnel will wear a respirator while they are present in the patient's room. Fit testing is the responsibility of the Department of Corrections.

f. Airborne/Contact Isolation in the OR

- i. Elective operative procedures on patients requiring Airborne/Contact Isolation should be delayed until the patient is no longer infectious.
- ii. When emergency cases must be performed:
 - The patient must go directly into an operating room. If the operating room is not ready to receive the patient, the patient must be placed in an Airborne Isolation room in PACU.
 - The doors to the operating room should be closed during the case.
 - Traffic in and out of the room should be kept to a minimum.
 - Attempts should be made to perform the procedure at a time when other patients are not present in the operative suite (i.e., end of day) and when a minimum number of personnel are present.
 - Staff present when operative procedures are performed

should wear an N95 respirator rather than a standard surgical mask.

- The anesthesia machine should be equipped with a disposable anesthesia filter.
- iii. Portable HEPA units will be used in the Operating Room (ideally, one HEPA unit at the patient's head and another HEPA unit at the entrance to the OR room).

g. Additional Information

- i. Patients on Airborne/Contact Precautions should not ambulate in the hallways or be in public spaces, even if masked.
- ii. When the patient leaves the Airborne Infection 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 period should wear the appropriate respiratory protection.

h. Discontinuing Airborne/Contact Isolation

- For guidelines regarding discontinuation of Airborne/Contact precautions for airborne diseases, refer to [Attachment 1 - Type and Duration of Precautions Recommended for Selected Infections and Conditions](#).

I. Special Airborne/Contact Precautions

1. In addition to Standard Precautions, use Special Airborne/Contact Precautions for patient known or suspected to be infected with SARS-CoV-2 transmitted primarily by airborne droplet nuclei.
2. Principles of Special Airborne/Contact Precautions
 - a. Patient Placement
 - i. Patient should be placed in a private room with the door closed.
 - If an Airborne Infection Isolation Room (AIIR) is available it should be utilized for placement. A complete [listing of AIIRs](#) is available on [Infection Prevention's website](#) under [Frequently Requested Information](#) on the UNC Hospitals Intranet.
 - ii. If patient is not in an AIIR, a HEPA filter should be used during aerosol generating procedures (AGP). Place the HEPA unit near

the door.

- iii. If an AIIR is utilized, perform a tissue test to assess negative pressure at least daily and document results on the patient record. The process for performing a tissue test is as follows:

- From outside of the patient's room (i.e., corridor, anteroom), hold a thin single-ply strip of tissue along the bottom of the patient room door. The tissue should be drawn under the door towards the patient room. If the tissue is blown away from the door or falls straight to the floor, the room is not negative pressure and Plant Engineering 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, if an AGP is performed.

b. Hand Hygiene

- Per Standard Precautions

c. Personal Protective Equipment

- i. Wear respiratory protection (N95 respirator + eye protection or PAPR for fit tested staff; N95 or surgical mask for visitors), gloves and a gown when entering the room.
- ii. Before leaving the patient's environment, carefully remove and properly dispose of the gown and gloves.
- iii. Eye protection and respirators should be removed after exiting the patient room.
- iv. Reusable eye protection may be disinfected with an EPA-registered disinfectant after each use.
- v. Respirators should be immediately disposed of following each use.

d. 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 clean and disinfect them before use for another patient. Refer to the Infection Prevention policy: [Cleaning and Disinfection of Non-Critical Items](#) for guidelines for cleaning commonly shared patient care equipment.

e. Patient Medications

- Medications taken into a patient room that cannot be left at the bedside and must be returned to the medication storage area (e.g., Pyxis) should be wiped with an EPA-registered 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 Patient Care policy: [Medication Administration](#).

f. 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. Supplies should be handled only with clean hands or clean gloves and should be stored in a drawer/cabinet.
- iii. When a patient on Special Airborne/Contact Precautions is transferred from the room or discharged, unused supplies, if not transferred with or given to the patient must be discarded and not used if: (1) the item is visibly soiled, wet, or damaged; (2) a package item has been opened or the integrity of the package has been compromised. Supplies outside of carts should be wiped down with an EPA-registered disinfectant or discarded if they cannot be wiped down.
- iv. Tape rolls used in a patient room should not be returned to clean supply areas (including drawers in patient's rooms) and should be discarded upon discharge.

g. Patient Transport

- i. Limit the movement and transport of the patient from the room to essential purposes only.
- ii. Patients should wear a tight-fitting surgical mask. Mechanically ventilated patients should be transported using a closed system ventilator or manual ventilation bag with a HEPA filter.

h. Visitors

- i. Visitors should be encouraged to follow Special Airborne/Contact Precautions while in the patient room including the use of gown, gloves, and either an N95 or surgical mask and eye protection.
- ii. Visitors must perform hand hygiene when entering and exiting the

patient room.

- iii. If a pediatric patient's primary caregiver(s) desires to "room in" with the patient, they should be educated about PPE available to them to reduce their risk specifically to acquiring the infection, spreading the infection, and spreading the infection to other family members. They should be encouraged to wear a surgical mask, gloves, and an isolation gown in the patient room.
- iv. When a patient from a prison is on Special Airborne/Contact Precautions, the accompanying Department of Corrections personnel will wear an N95 respirator, eye protection, gown, and gloves while they are present in the patient's room. Fit testing is the responsibility of the Department of Corrections.

i. Special Airborne/Contact Isolation in the OR

- i. If the operating room is not ready to receive the patient, the patient must be placed in an AIIR or private room with a door in PACU or PCS.
- ii. The anesthesia machine should be equipped with a disposable anesthesia filter.
- iii. Portable HEPA units will be used in the Operating Room (ideally, one HEPA unit at the patient's head and another HEPA unit at the entrance of the OR room).
- iv. Before the patient is transported from the OR, OR staff will contact PACU to confirm the Airborne Isolation Room is ready and the negative pressure has been established with a tissue check.

NOTE: When the room is changed from a positive to negative pressure, the room may take 10 minutes to reach negative pressure.
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j. Additional Information

- i. Patients on Special Airborne/Contact Precautions should not ambulate in the hallways or be in public spaces, even if masked.
- ii. When the patient leaves the Airborne Infection Isolation room, close the room door and leave the Special Airborne/Contact Precautions sign on the door until the room has been cleaned.

k. Discontinuing Special Airborne/Contact Isolation

- For guidelines regarding discontinuation of Special Airborne/Contact precautions refer to the [Inpatient Discontinuation of](#)

J. Special Precautions

1. For patients with known or suspected smallpox, monkey pox, Viral Hemorrhagic Fever (VHF) (e.g., Lassa, Ebola, Marburg, Argentine, Bolivian) refer to the Infection Prevention policy: [High Consequence Pathogens - Preparedness and Response Plan](#). This policy includes specific details on isolation and protocols.
2. Refer to the Infection Prevention policy: [Infection Prevention Response to the Intentional Use of a Biothreat Agent](#) for further information on possible infectious bioterrorism agents.

K. 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
 - Protective precautions will be ordered at the discretion of the attending physician or their designee. Possible indications for protective precautions include:
 - i. Absolute neutrophil count (ANC) <1000 WBC mm³
 - ii. Agranulocytosis
 - iii. Hematopoietic Stem Cell Transplant (HSCT)
 - iv. Lymphomas and leukemia in certain patients (especially in the late stages of Hodgkin's disease and acute leukemia)
 - v. Patients receiving large doses of immunosuppressive drugs, whole body irradiation, or chemotherapy
 - vi. Solid organ transplant
3. Principles of Protective Precautions
 - a. Patient Placement
 - 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

- 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

- 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.
- 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.
- 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

- Transportation of the patient should be limited to avoid exposure to any source of infection.
- 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.
- Ideally, procedures outside the patient's room are scheduled at the beginning of the day.
- Staff should ensure that the patient wears a surgical mask (or N95 respirator at the request of the licensed practitioner) while out of their room.

e. Guidelines for Therapeutic Activities with Patients on Protective Precautions

- The patient should wear a tight-fitting surgical mask (or N95 respirator at the request of the licensed practitioner) when they leave their room.

4. Additional Information

- Staff, students, volunteers, and visitors with communicable infections such as upper respiratory infections, skin infections, and gastrointestinal infection

must not enter the patient's room.

- 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. An immunosuppressed diet may be ordered at the discretion of the licensed practitioner. Refer to the Nursing policy: [Neutropenia](#).
5. Discontinuing Protective Precautions
- Protective Precautions may be discontinued with a written order by the attending physician.

L. Non-Compliance with Transmission-based Precautions

- If a competent patient who must remain on isolation precautions will not stay in their room, after education has been provided, 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 complies. If the patient continues to be non-compliant, 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.

III. References

Banach DB, Bearman G, Barnden M, et al. Duration of Contact Precautions for Acute-Care Settings. *Infect Control Hosp Epidemiol*. 2018;39(2):127-144. doi:10.1017/ice.2017.245

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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.

APIC Text of Infection Control and Epidemiology. 4th Edition. 2014

IV. Related Policies

[Infection Prevention Policy: Cleaning and Disinfection of Non-Critical Items](#)

[Infection Prevention Policy: Diversional Supplies \(e.g., Toys and Books\)](#)

[Infection Prevention Policy: Environmental Services](#)

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

[Infection Prevention Policy: High Consequence Pathogens - Preparedness and Response Plan](#)

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

[Infection Prevention Policy: Infection Prevention Guidelines for Safe Patient Care](#)

[Infection Prevention Policy: Patients with Cystic Fibrosis](#)

[Infection Prevention Policy: Pediatric Play Facilities and Child Life](#)

[Infection Prevention Policy: Psychiatric Units](#)

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

[Infection Prevention Policy: Women's Hospital Maternal Units \(3WH, L&D, 5WH, NBN & NCCC\)](#)

[Nursing Policy: Neutropenia](#)

[Patient Care Policy: Medication Administration](#)

[COVID-19 Workflow - Infection Prevention Guiding Principles for Care of the Patient with COVID-19](#)

[COVID-19 Workflow - Isolations Precautions for COVID Positive and COVID PUI Patients](#)

Attachments

[01: Type and Duration of Precautions Recommended for Selected Infections and Conditions](#)

[02: Quick Glance for Respiratory Virus Panel Isolation Precautions](#)

[03: Definition of Multi-Drug Resistant Pathogens Requiring Contact Isolation](#)

[04: Management of Herpes Zoster \(Shingles\)](#)

[05: Isolation Guidelines for Vaccinia Recipients and Patients with Known or Suspected Smallpox](#)

[06: Sequence for Donning/Doffing Personal Protective Equipment \(PPE\)](#)

[07: Infection Control Recommendations for Multiple Patients/Healthcare Personnel with Signs/Symptoms of Gastroenteritis](#)

[08: Protocol for Obtaining MRSA Surveillance Swabs](#)

[09: Removal of Contact Precautions for Patients with MRSA](#)

[10: Transport of Patients](#)

[11: Removal of Contact Precautions for Patients with VRE](#)

Approval Signatures

Step Description	Approver	Date
Policy Stat Administrator	Kimberly Novak-Jones: Nurse Educator	03/2024
	Thomas Ivester: CMO/VP Medical Affairs	03/2024
	Emily Vavalle: Dir Epidemiology	03/2024
	Sherie Goldbach: Project Coordinator	03/2024

Applicability

UNC Medical Center