


Infection Control Manual		
	Policy Name	Patients with Cystic Fibrosis
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	Responsible for Content	Hospital Epidemiology

I. Description

Addresses the infection control management of patients with Cystic Fibrosis

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II. Rationale

Cystic Fibrosis patients are often colonized with multiple drug-resistant organisms (MDROs). An effective infection control policy is necessary to minimize the spread of MDROs to other patients receiving care at UNC Health Care (UNCHC).

III. Policy

UNC Health Care has adopted the infection control guidelines of the Cystic Fibrosis Foundation (Infection Prevention and Control Guideline for Cystic Fibrosis: 2013 Update) with the following exceptions and additions.

A. General Principles of Healthcare Settings

- All patients with CF must be placed on Contact Precautions, regardless of colonization with or without MDROs. All patients with CF could have pathogens in respiratory tract secretions that are transmissible to others. All areas (e.g. inpatient, ambulatory care, diagnostic, and perioperative services) must implement Contact Precautions for patients with CF.
 - This will be communicated in the electronic medical record in the Infection Field with the denotation of CF.
 - CF noted in the Infection Field in EPIC requires Contact Precautions for that patient, regardless of the patient's location. UNCHC will define antibiotic resistance as provided in the Isolation Precautions Infection Control Policy. Patients with CF and MDROs will continue to be flagged in the electronic medical record, per UNC Healthcare Policy.
- In all settings, it is the policy of UNCHC that all healthcare personnel (HCP), visitors, and family members must comply with Contact Precautions for all patients with CF. When

entering the room, HCP are required to wear gloves and a yellow cover gown whenever clothing may contact the patient or surfaces in the room. When exiting the room, the gown and gloves must be removed and hand hygiene performed.

3. It will be the responsibility of the medical staff to assist the nursing staff as necessary with patient and visitor/family education and enforcement of the Cystic Fibrosis Policy. Hospital Epidemiology personnel will also be available as needed for assisting with patient and visitor/family education and adherence issues. Live plants in water or dirt pose a potential risk to CF patients and must be approved by the patients' physician.
4. Patients with CF and a first positive AFB positive isolate (smear or culture) must be placed on Airborne Precautions until TB is excluded. For patients with a history of Nontuberculous Mycobacteria (NTM), Airborne Precautions are not needed if the attending physician does not suspect or treat the patient for TB. If MTB is suspected of in the differential diagnosis, the patient must be placed on Airborne Precautions until diagnosed or ruled out per TB Control Plan.
 - a. Physicians or Infection Preventionists may request that a MTB PCR be performed by McClendon laboratories on the first AFB smear positive, to rule out TB and thus discontinue Airborne Precautions. Negative TB PCRs on smear negative or smear indeterminate samples cannot be used to discontinue Airborne Precautions.
 - b. For patients that have specimens for AFB lab tests ordered as a component of a procedural protocol (e.g., organ transplantation, CF/thoracic patient bronchoscopy), Airborne Isolation is not required, unless TB is suspected or in the differential diagnosis.
 - c. For further information consult the TB Control Plan.
5. Clinic exam room surfaces must be disinfected with an EPA- registered hospital disinfectant after each patient with CF. Gloves must be removed and hands cleaned after providing patient care and prior to use of computer equipment. Computers, monitors, keyboards, and mice should be cleaned with an EPA- registered hospital disinfectant (e.g., Sani-Cloth). Touch screens should be wiped with 70% alcohol.

B. Surveillance Strategies

1. Hospital Epidemiology provides comprehensive surveillance for all inpatient units, hospital-based and Faculty Physician clinics and for UNC Home Health and Hospice.

C. CF Patient Activity Outside of Hospital Room

1. CF patients will wear a surgical mask when they leave their rooms. They may leave their room for therapeutic purposes (e.g. x-ray, OR). As part of their rehabilitation, some patients need to exercise outside their rooms.
2. CF patients may ambulate outside their rooms only in the unit in which they are housed provided the following is done:
 - a. Patients maintain a greater than 6 foot distance from other CF patients to prevent droplet and contact transmission of diseases.
 - b. The patient should don a clean hospital gown, clean clothes, or a clean hospital gown over their clothing prior to leaving the room.
 - c. Patients perform hand hygiene before leaving room.
 - d. Patients are instructed on infection prevention principles, including not touching objects in the environment, environmental surfaces, or other patients.

- e. 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.
 - f. 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). Dressings should be clean and contain any wound drainage.
 - g. Patient must be able to manage their respiratory secretions in a manner to prevent droplet spread of organisms.
 - h. Patients may not ambulate in the hall if they are on Droplet or Airborne Precautions.
 - i. If the patient wishes to leave the unit, they must be accompanied by HCP.
 - j. Patients who cannot or will not follow these requirements must be accompanied by a trained HCP 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, Hospital Epidemiology may temporarily suspend these privileges.
3. If a HCP is accompanying a Cystic Fibrosis patient:
- a. The HCP 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.
 - b. The patient should don a clean hospital gown, clean clothes, or a clean hospital gown over their clothing prior to leaving the room.
 - c. Prior to leaving the room, the patient will perform hand hygiene independently or with assistance.
 - d. The HCP will remove their contaminated gloves, and gown if applicable, and perform hand hygiene.
 - e. The HCP should then don a clean isolation gown and gloves prior to leaving the room.
 - f. The patient should be instructed not to handle any items in the environment. The accompanying HCP should avoid touching items in the environment. If it is necessary for the patient or HCP to handle items, such as stair rails when walking down stairs, then the HCP 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.
 - g. After returning the patient to the room, the HCP must remove gown and gloves and perform hand hygiene upon leaving the patient room.

D. Respiratory Therapy

1. Soiled Tissues may be disposed of in trash receptacles.
2. All nebulizers (e.g., aerosol tracheal mask, aerosol face mask, and mist tent) are changed by respiratory therapy every 24 hours. This includes the various plastic tubes, aerosol tubing, etc. Between treatments on the same patient, the small volume medication nebulizers will be taken apart, rinsed with sterile water and be allowed to air dry. The nebulizer should not be stored wet in a plastic bag. Refer to the Respiratory Care Infection Control Policy.

E. Ambulatory Settings

1. Contact precautions per UNCMC Isolation policy will be followed when providing care for all CF patients.

F. Psychosocial Impact of Infection Control Guidelines

1. In the CF Foundation Guidelines, it is recommended that adherence to infection control guidelines by HCP be monitored, and that feedback be provided to the CF Team. Hospital Epidemiology will perform periodic assessments of isolation compliance; however, specific rounds for compliance with CF infection control guidelines will not be conducted.

G. Waiting Room Behaviors in Outpatient Areas

1. All patients with CF must wear a surgical mask outside of the clinic room, regardless of colonization with MDROs.

H. Volunteers

1. All volunteers working with CF patients must be a member of the Hospital Volunteer Association and have completed the appropriate training. Since working with other CF persons would place them at risk, volunteers with Cystic Fibrosis will not be assigned to work with CF patients.

IV. References

Infection Prevention and Control Guideline for Cystic Fibrosis: 2013 Update, ICHE 2014, Vol. 35, No. S1.

V. Reviewed/Approved by

Hospital Infection Control Committee

VI. Original Policy Date and Revisions

Revised on Dec 2003, June 2005, May 2008, May 2011, Aug 2014, Sept 2016_{rev}, Sept 2017, Feb 2018_{rev}

Appendix 1: Guidelines for Activities of CF Patients

Hospital Facility	Mask	Yellow Cover Gown	Gloves	Additional Precautions
Play Atrium	Patient: Yes Staff: No Family: No	Patient: No Staff: Yes Family: No	Patient: No Staff: Yes Family: No	<ul style="list-style-type: none"> May not attend while other patients are in the Play Atrium HCP will disinfect all equipment and/or toys used by the patient before use by another patient.
Cafeterias Coffee Shops Starbucks Gift Shop	May not visit			<ul style="list-style-type: none"> Family may go, but must perform hand hygiene before leaving the room.
Hall on the unit the patient is housed	Patient: Yes Staff: No Family: No	Patient: No Staff: Yes Family: No	Patient: No Staff: Yes Family: No	<ul style="list-style-type: none"> See ambulation guidelines in policy above
Nurses Station	May not visit	May not visit	May not visit	May not visit
Butterfly Garden (weather permitting)	Patient: Yes Staff: No Family: No	Patient: No Staff: Yes Family: No	Patient: No Staff: Yes Family: No	<ul style="list-style-type: none"> Only if accompanied by healthcare provider (e.g., nurse, NA, physical therapist)

Hospital Facility	Mask	Yellow Cover Gown	Gloves	Additional Precautions
UNCMC sponsored event or activities held on Hospital Property to include Transplant Support Group	Patient: Yes if more than one CF patient is present Staff: No Family: No	Patient: No Staff: Yes, if anticipating contact with patient Family: No	Patient: No Staff: Yes, If anticipating contact with the patient Family: No	<ul style="list-style-type: none"> • Only one CF patient may be present at any event or activity held indoors. • More than one CF patient may be present at events or activities held outdoors. The CF patients, their family members and staff accompanying them must maintain a >6 foot distance from one another to prevent droplet and contact transmission. • Family members with CF who live together in the same household may attend indoor or outdoor events and activities together.
Hospital School	Patient: Yes Staff: No Family: No	Patient: No Staff: Yes Family: No	Patient: No Staff: Yes Family: No	<ul style="list-style-type: none"> • May attend only when other patients are not in the schoolroom. HCP will clean equipment (e.g., computer keyboards) after use