

I. PURPOSE

Epidemiological studies demonstrate the organisms infecting or colonizing the respiratory tracts of Cystic Fibrosis (CF) patients can be transmitted to other CF patients. Standard precautions, transmission-based precautions, appropriate hand hygiene for health care workers (HCW), patients, and their families, and care of respiratory tract equipment to prevent the transmission of infectious agents serve as the foundations of infection control and prevent the acquisition of potential pathogens by patients with CF. The following recommendations are intended to minimize transmission of resistant organisms in the hospital setting, ambulatory care, pulmonary function test sites, and social settings for adult and pediatric patients.

II. POLICY

CF pathogens are transmitted by the droplet and contact routes. Because microbiology methods are not 100% sensitive for the detection of CF pathogens, practices that minimize the spread of respiratory secretions and prevent transmission of respiratory tract pathogens must be followed with ALL CF patients; they cannot be implemented according to the specific microbiology results of individual CF patient. This policy will be made available to patients and family members upon request.

A. Hospitalized Patients

1. Room/Nursing Assignment:

- a) Assign CF patients to a private room with a private bathroom; affix a purple "UCSF Precautions STOP" sign on the door.
 - i. If assignment to a private room is not possible, CF patients may not share rooms with other CF patients, patients with tracheostomy or neutropenic patients.
 - ii. If assignment to a room with a private bathroom is not possible, CF patients should not share a bathroom with other CF patients, neutropenic patients or with patients with a tracheostomy.
- b) CF patients may share a hospital room with a person who sleeps in the same room at home, e.g. siblings.
- c) The nursing unit will locate personal protective equipment (masks & eye protection, gowns) just outside of each CF patient's room.



2. Standard and Transmission-based Precautions

- a) Gowns, gloves and masks/eye protection should be used in accordance with Standard Precautions. As per the UCSF Precautions signage, HCW must anticipate potential contact with respiratory secretions through contact with the patient or the patient's environment.
 - I. Wear gown and gloves for anticipated respiratory secretions soiling
 - II. Wear mask with eye protection for anticipated splashes or sprays such as those created during cough-inducing procedures.
- b) For CF patients who require isolation for other conditions or diseases, affix the appropriate transmission-based precautions sign on the door, in addition to the purple UCSF Precautions sign, **Transmission- based precautions and/or any associated departmental policies will supercede the general "UCSF Precautions"**.
- c) **Hand hygiene is the single most important practice for preventing transmission of infectious agents.**
 - I. **HCW must perform hand hygiene in accordance with the Hand Hygiene policy.**
 - II. CF patients should be educated in frequent hand hygiene using alcohol-based hand rub and/or handwashing sinks in their own rooms.
 - III. CF Patients must perform hand hygiene prior to leaving their rooms.
- d) There is no recommendation for CF patients to routinely wear surgical masks when outside of their rooms. Masks will be made available for patients who wish to wear one.

3. Equipment and Environmental Cleaning
 - a) Clean rooms occupied by CF patients or from which CF patients have been discharged according to routine cleaning procedures.
 - b) Follow hospital policy and procedure for disinfection and sterilization of patient care equipment.
 - c) Disinfect environmental surfaces when they become contaminated with respiratory tract secretions, e.g., during pulmonary function testing, body plethysmography.
 4. Respiratory therapy and pulmonary function testing
 - a) Perform all respiratory interventions, including aerosol therapy, airway clearance and sputum collection, in the patient's room.
 - b) Dedicate airway clearance devices (e.g., flutter, acapella, pep device, therapy vest) to single patient use during inpatient hospitalization.
 - c) Respiratory Therapy/Pulmonary Function Testing equipment shall not be shared between CF patients.
 - a. Reusable equipment shall be disinfected before re-use in accordance with hospital policy for disinfection and sterilization.
 - b. Disposable items not used for invasive purposes (e.g. nebulizers) may be issued per patient and reused for the same patient. Schedule for replacement of such items will be determined by the nursing unit and respiratory therapy.
 5. Communal/Social Settings
 - a) Playrooms, Schoolroom, Teen Lounge, Allstars Technology Room, and pulmonary function laboratory should accommodate only one CF patient at a time.
 - i. Admission of CF Patients to 6 Long will be communicated by charge nurse to unit-based Child Life specialist (CLS) at morning report; this information is conveyed to the CL CF Specialist.
 - ii. Admission of CF patients to other pediatric in-patient nursing areas will be communicated to the CL CF specialist by the CLS following the patient.
 - iii. The CL CF Specialist creates a daily schedule for programming spaces so that CF patients have assigned times that do not overlap with other CF patients.
 - b) Neutropenic patients or patients with a tracheostomy should not attend the Playrooms, Schoolroom, Teen Lounge, Allstars Technology Room, or pulmonary function laboratory at the same time as a CF patient.
 - c) Patients must wash their hands prior to entering the room.
 - d) Equipment, computers, or toys handled by CF patients shall be disinfected prior to being handled by another patient.
 - e) Patients in Transmission-based precautions may not use these communal facilities.
 - f) Patients with CF are not allowed to visit in other CF patients' rooms
 - g) With a physician's order, CF patients are allowed to visit public areas of the hospital (e.g cafeteria, lobby, gift shop)
 - i. CF patients should maintain a 3 foot distance from other known CF patients when in public places.
 - ii. Children's Hospital Security Policy requires that pediatric patients be accompanied by a staff member when leaving the unit.
- B. Outpatient Ambulatory Practices**
1. Schedule and manage outpatients to minimize time in common waiting area.
 - a) Stagger appointment times in the clinic schedule
 - b) Move patients to an exam room as soon as one is available.
 - c) Keep the patient in one exam room; the CF team rotates through each room.
 2. Ensure ample alcohol based hand rub is available in the corridors and in each exam room.
 3. Disinfect environmental surfaces
 - a) Before and after spirometry

- b) Before the next CF patient is admitted to the exam room
- 4. Mucous produced by patients that is not captured for culture will be caught in a tissue and discarded into a covered, no touch receptacle.

III. REFERENCES

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