

I. PURPOSE

Epidemiological studies demonstrate the organisms infecting or colonizing the respiratory tracts of Cystic Fibrosis (CF) patients can transmit to other CF patients by direct contact or through droplet transmission. Standard precautions, transmission-based precautions, appropriate hand hygiene for Healthcare Personnel (HCP), patients, and their families, and care of respiratory equipment to prevent the transmission of infectious agents are fundamental to prevent the transmission of potential pathogens to patients with CF. The following recommendations minimize transmission of resistant organisms in the hospital setting, ambulatory care, pulmonary function test sites, and social settings for adult and pediatric patients.

II. REFERENCES

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- F. Additional references: See Appendix i

III. POLICY

HCP will minimize the spread of respiratory secretions and prevent transmission of respiratory tract pathogens to CF patients including those who have undergone lung transplantation.

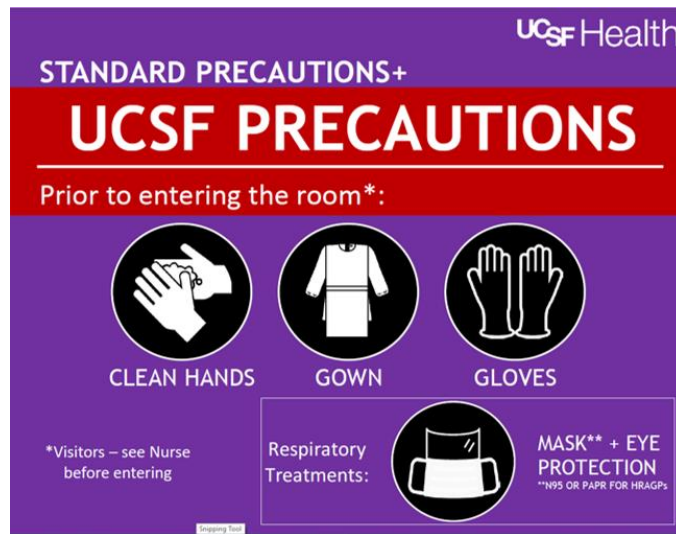
IV. PROCEDURE

Inpatient units, CF clinics, and Pulmonary Function Testing (PFT) labs: Implement UCSF Isolation Precautions for every CF patient contact. Wear a gown and gloves for routine contact, mask with eye protection (shield or goggles) for contact with respiratory secretions, and N95 or Powered Air Purifying Respirator (PAPR) for high hazard respiratory treatments.

A. Hospitalized Patients

1. Room/Nursing Assignment:

- a. Assign CF patients to a private room with a private bathroom, and affix the “UCSF Isolation Precautions” sign to the door.



- i. If assignment to a private room is not possible, CF patients may not share rooms with:
- Other CF patients
 - Patients with tracheostomies
 - Immune-suppressed patients
 - Neutropenic patients
- ii. If assignment to a room with a private bathroom is not possible, CF patients may not share a bathroom with:
- Other CF patients
 - Patients with tracheostomies
 - Immune-suppressed patients
 - Neutropenic patients
- b. CF patients may share a hospital room with a person who sleeps in the same room at home, e.g. siblings. (Household members may stay in the patient’s room.)



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- c. Nursing will stock personal protective equipment (gowns and gloves, masks & eye protection, N95, PAPR) at CF patient's room entrance.
- d. Patients will have dedicated disposable equipment, e.g. stethoscope, blood pressure cuff, thermometer.

B. Standard and Transmission-based Precautions

1. As per the UCSF Precautions signage, HCP must anticipate potential contact with respiratory secretions through contact with the patient or the patient's environment; therefore gowns, gloves and masks/eye protection must be worn as follows:
 - a. Wear gown and gloves for all contact with a patient diagnosed with CF.
 - b. Wear mask with eye protection for anticipated splashes or sprays such as those created during cough-inducing procedures.
 - c. Wear N-95 or PAPR during a high hazard medical procedure.
 - d. Wear a PAPR if the patient has an airborne infectious disease and is receiving a high hazard medical procedure.
2. For CF patients who require isolation for other conditions or diseases, affix the appropriate transmission-based precautions sign on the door (Contact, Enteric Contact, Droplet or Airborne precautions) in addition to the UCSF Precautions sign. The highest level of isolation or associated departmental policies necessary for the patient's safety will supersede the "UCSF Isolation Precautions."
3. Hand hygiene is the single most important practice for preventing transmission of infections. HCP must perform hand hygiene in accordance with the Hand Hygiene policy.
4. Educate CF patients in frequent hand hygiene using alcohol-based hand rub and/or handwashing sinks in their own rooms. CF Patients must perform hand hygiene prior to leaving their rooms and upon returning.
5. CF patients must routinely wear surgical masks covering mouth and nose when out of their inpatient rooms, and during appointments in the CF clinic.

C. Equipment and Environmental Cleaning

1. Clean the rooms occupied by CF patients or from which CF patients have been discharged according to routine cleaning procedures.
2. Follow hospital policy and procedure for disinfection and sterilization of patient care equipment.
3. Disinfect environmental surfaces when they become contaminated with respiratory tract secretions, e.g., during pulmonary function testing, body plethysmography.

D. Respiratory therapy and pulmonary function testing

1. Perform all respiratory interventions, including aerosol therapy, airway clearance and sputum collection, in the patient's room.

2. Dedicate airway clearance devices (e.g., flutter, acapella, pep device, therapy vest) to single patient use during inpatient hospitalization.
 3. Respiratory Therapy/PFT equipment shall not be shared between CF patients.
 - a. Disinfect reusable equipment before re-use according to 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.
- E. Communal/Social Settings
1. All communal settings such as Playrooms, Schoolroom, Teen Lounge and PFT lab will accommodate one CF patient at a time.
 2. Admission of pediatric CF patients who are eligible for child life services will be communicated by charge nurse to the unit-based Child Life Specialist (CLS) at morning report; this information is conveyed to the departmental Child Life CF Specialist.
 3. Admission of CF patients to other pediatric in-patient nursing areas will be communicated to the Child Life CF specialist by the CLS following the patient.
 4. The Child Life CF Specialist creates a daily schedule for programming spaces so that CF patients have assigned times that do not overlap with other CF patients.
 5. Neutropenic patients or patients with a tracheostomy will not attend communal settings at the same time as a CF patient.
 6. Patients must wash their hands prior to entering the room.
 7. Disinfect equipment, computers, or toys handled by CF patients before being handled by another patient per policy.
 8. Patients in Transmission-based precautions (Contact, Enteric Contact, Droplet or Airborne isolation) may not use these communal facilities.
 9. Patients with CF are not allowed to visit in other CF patients' rooms
 10. With a physician's order, CF patients are allowed to visit public areas of the hospital (e.g cafeteria, lobby, gift shop) with appropriate escort as required.
 11. Benioff Children's Hospital Security Policy requires pediatric patients to be accompanied by a staff member when leaving the unit.
 12. CF patients will maintain a distance of **6 feet** from other known CF patients when in public places
- F. Outpatient Ambulatory Practices
1. Schedule and manage outpatients to minimize time in common waiting area.
 - a. Stagger appointment times in the clinic schedule such that CF patients do not share time in that area.
 - b. Mask patients in the waiting room. Patient may remove mask in exam room.
 - c. Staff will wear gown and gloves.
 - d. Move patients to an exam room as soon as one is available.



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- e. 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 by vigorously scrubbing all surfaces:
a. Before and after spirometry.
b. Before the next CF patient is admitted to the exam room.
c. After an exam room is cleaned, no other CF patient may enter for 30 minutes.
4. Mucus produced by CF patients not captured for culture will be caught in a tissue and discarded into a waste receptacle.

V. HISTORY OF POLICY

VI. HISTORY OF POLICY

Revised: Revised 6/02, 3/04, 10/04, 8/08, 11/11, 7/14, 8/17, 4/21

Revision Team:

Table with 2 columns: Name and Department. Rows include Deborah Yokoe, MD, MPH (Adult Infectious Disease Service), Kelly Bushman RN, BSN, CNRN (Department of Nursing), Susan Penney (Risk Management), Toni Workman, RN (Clinical Operations & Patient Placement), Renee Graham-Ojo, RN, MPH, CIC (Hospital Epidemiology and Infection Prevention), and Amy Nichols, RN, MBA, CIC (Hospital Epidemiology and Infection Prevention).

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Appendix i

References for CF Foundation's updated infection prevention policy

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Appendix I -cont'd

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