

## INFECTION CONTROL GUIDELINES FOR PATIENTS WITH CYSTIC FIBROSIS

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This document replaces:	<b>Infection Control Guidelines for Patients with Cystic Fibrosis November 2009</b>

Please *specify* standard/criterion numbers and tick ✓ other boxes as appropriate

*The Strategic Directions 2007-2012 were agreed by the Board of Directors in October 2007 to support the Trust's vision "Respond, Deliver, Enable". The Key Milestones below will ensure there is a shared understanding about what needs to be delivered.*

Monitoring Information		Strategic Directions – Key Milestones	
Patient Experience		Waiting	
Assurance Framework		Privacy and Dignity	
Monitor/Finance/Performance		Efficiency and Effectiveness	
Care Quality Commission Outcomes:	8	Delivery of Care Closer to Home	
		Infection Control	✓
NHSLA Risk Management Standards for Acute Trusts			
NHSLA CNST Maternity Clinical Risk Management Standards:			
Other ( <i>please specify</i> ):			
<b>Note:</b> This policy has been assessed for any equality, diversity or human rights implications			

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## 1. INTRODUCTION

Regular bacteriological surveillance of sputum for Cystic Fibrosis (CF) patients is extremely important. Respiratory infection in CF patients can be more significant than for other individuals and is associated with deterioration of lung function. Many different bacterial organisms, viruses and fungi can infect the respiratory tract of patients with CF. The following are a selection of examples:

- *Burkholderia cepacia* complex
- Meticillin resistant *Staphylococcus aureus*
- *Pseudomonas aeruginosa* and other similar gram negative organisms.
- *Non-tuberculous mycobacteria*
- Meticillin sensitive *Staphylococcus aureus*
- *Haemophilus influenzae*
- *Stenotrophomonas maltophilia*
- Respiratory Syncytial Virus
- *Aspergillus fumigatus*

To reduce risk of transmission between CF patients, strict infection control practice with avoidance of patient mixing within respiratory clinics and of CF in-patients is essential.

These guidelines provide practical information regarding patient segregation, equipment decontamination and isolation procedures. General guidance on infection control procedures such as standard precautions and decontamination can be found in electronic form on the hospital intranet.

## 2. MANAGEMENT OF CYSTIC FIBROSIS CLINICS

### 2.1 Clinic Organisation

- Strict non mixing of all CF patients is required. Therefore outpatients must not sit in the waiting area, but be shown straight into a consulting room. If this room is required to be used for another CF patient it must be cleaned and left for at least 30 minutes, but ideally for 1 hour.
- Patients known to have *Burkholderia cepacia* complex (BCC) colonisation must not attend routine CF clinics but be seen in other non CF clinics.
- Clinic staff including consultants and other medical staff, physiotherapists, dieticians, phlebotomists, ECG technicians etc will visit patients in the same clinic room, rather than the patient moving from room to room.
- Outpatients should also be advised not to wait in other communal areas such as the pharmacy waiting area, in order to reduce risk of contact with other CF patients.

### 2.2 Infection Control Procedures

- Strict adherence to hand hygiene guidelines is a requirement. Clinical staff should be bare below the elbows and gloves and aprons are advised for clinical examinations, testing of respiratory function and the collection of sputum samples.

- Patients and visitors should be encouraged to decontaminate their hands when they enter the clinic room and upon leaving.
- Detergent wipes should be available in all the examination rooms for cleaning of multi-use items such as stethoscopes and saturation probes.
- If physiotherapy takes place in the clinic, physiotherapy staff should be provided with wrap around aprons and gloves, giving adequate cover of clothing. This must be changed between patients.
- Peak flow meters must either be issued to individual patients or contain a disposable bacterial/viral filter and mouth piece and changed between patients. The Meter then being decontaminated between patients with detergent wipes.
- Spirometer - this must be used with a bacterial/viral filter that is changed between patients. External surfaces, tubing etc must be decontaminated between patients using detergent wipes. Spirometer heads must be sent for decontamination by HSDU on a weekly basis. If the vitalograph bellows machine is used refer to appropriate guidance for decontamination.
- The trolleys used for moving equipment from room to room must be cleaned thoroughly with detergent and water or detergent wipes prior to each clinic and between patients.
- Stethoscopes - must be cleaned using detergent wipes after each patient examination.
- Couches - must be cleaned with detergent and water or detergent wipes and dried after every patient.
- Nebuliser compressors must be wiped with a detergent wipe after each patient use. If visible dust is present on the vents please contact Clinical Measurements to arrange cleaning.
- Toys should not be passed around and must be cleaned after use. Soft toys are not appropriate.
- Clinic rooms should be cleaned after each clinic using detergent and water.

### **3 MANAGEMENT OF INPATIENTS WITH CYSTIC FIBROSIS**

#### **3.1 Accommodation**

- All CF patients should be managed in en-suite single rooms with the door closed. If en-suite facilities are unavailable, communal bath/shower rooms can be used providing they are clean, and not shared with another CF patient.
- Adult patients known to have *B. cepacia* complex should be admitted to an en-suite single room on a different ward to other CF patients. If two or more patients with *B. cepacia* complex are admitted they must be accommodated in single rooms on separate medical wards.
- Paediatric patients with *B. cepacia* complex should not be cared for on the same nursing team area on the children's ward as another child with CF.

- Wherever possible the nurse caring for a CF patient should not provide care to other patients with CF, or non-CF patients with infectious organisms such as MRSA.

### **3.2 Socialising**

- CF patients should be asked not to socialise with other patients on the ward or with other CF patients.
- CF patients should be allowed to go to non clinical areas, such as the shop and the Oasis restaurant but should avoid sitting with other patients.

### **3.3 Room and Equipment Cleaning**

- Single rooms occupied by CF patients must be cleaned thoroughly before their admission, during admission and after discharge.
- Great care needs to be taken to ensure that all medical equipment used in CF cubicles is adequately decontaminated before entry and on removal.

### **3.4 Infection Control Procedures**

- All staff should strictly adhere to hand hygiene guidelines before any patient contact and on leaving the cubicle. Jackets if worn, must be removed along with wristwatches and/or wrist jewellery before entering the cubicle and sleeves rolled up to facilitate adequate hand hygiene as per Uniform and Workwear Policy. On ward rounds the number of people entering the room should be kept to an absolute minimum.
- Protective clothing should be worn as per standard precautions. However, for procedures such as physiotherapy, a risk assessment should be made of the level of contact required and risk of sputum contamination. If necessary single-use wrap-around aprons and gloves should be worn.
- See 2.2 for advice on decontamination of specific items of equipment.

### **3.5 Physiotherapy for Patients with *B. cepacia* Complex or MRSA**

- For close physical contact &/or generation of cough/sputum production, theatre blues should be worn. These can be obtained by contacting linen services. These can be delivered directly to the physiotherapy department.
- Following treatment of patient, discard used theatre blues into the skip in the changing room and shower if contamination of the skin has occurred. As a minimum wash hands and arms thoroughly after removal of theatre clothing.
- Sufficient theatre clothing should be obtained for the number of daily treatments and for on-call staff.

### **3.6 Bramble In-Patients Attending the School Room or Play Room**

- CF children can attend the school, but must not attend the same schoolroom as another child with CF. Children can attend the playroom, but only one CF child is allowed in the

playroom at any one time. If a child with *B. cepacia* complex does attend the school or play room it should be left for 1 hour after cleaning before use by another child with CF.

- Teachers/classroom assistants must wash their hands after any contact with respiratory secretions, tissues etc.
- If the child is coughing/expectorating copious secretions there may be significant contamination of the environment. Consideration should then be given to providing schooling in the child's room. They should not attend the play room.
- CF patients with MRSA should be schooled in their own room. Any equipment taken into the isolation room must be decontaminated after use.

### **Further Reading**

1. Saiman, L, Siegal, J (2003) Infection Control recommendations for patients with cystic fibrosis: microbiology, important pathogens and infection control practices to prevent patient-to-patient transmission. **American Journal of Infection Control** 31:3 Supplement
2. UK CF Trust Infection Control Gp (2004) *Pseudomonas aeruginosa* infection in people with cystic fibrosis. CF Trust
3. UK CF Trust Infection Control Gp (2004) The *Burkholderia cepacia* complex. CF Trust.