Livewell Southwest

Infection Control Guidelines for patients with Cystic Fibrosis

Version No. 2

Notice to staff using a paper copy of this guidance

The policies and procedures page of Intranet holds the most recent version of this guidance. Staff must ensure they are using the most recent guidance.

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Document review history

Version no.	Type of change	Date	Originator of change	Description of change
1	New document	December 2008	P. Jenks	New document
1:1		October 2011	Infection Control Nurse	Reviewed, no changes
1:2	Extended	November 2013	PRG Secretary	Extended no changes.
1:3	Extended	May 2014	Infection Control Nurse	Extended no changes.
1.4	May 2014	January 2014	Acting Manager Infection Prevention & Control Team	Logo and organizational details
2	Reviewed	January 2016	Infection Prevention and Control Manager	Minor updates.

Infection Control Guidelines for patients with Cystic Fibrosis

Summary

- To reduce risk of transmission between cystic fibrosis patients, strict infection control and avoidance of patient mixing within respiratory clinics and of cystic fibrosis inpatients is essential.

- Cystic fibrosis pathogens are transmitted by droplet and contact routes. Practices to contain respiratory secretions and prevent transmission must be followed with all cystic fibrosis patients.

- The most effective means of preventing cross infection is good hand hygiene, patient isolation and implementation of standard contact and droplet / airborne precautions.

- Daily cleaning of the patient environment and decontamination of equipment should be performed. Terminal environmental cleaning with a detergent/bleach solution should be performed on patient discharge.

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1. Policy objectives and scope

1.1 This policy aims to give guidance on the issues relating to infection control for Patients with cystic fibrosis (CF) who are admitted to Livewell Southwest or attend outpatient clinics at PHNT. It covers both adult and Paediatric patients.

2. Introduction

2.1 Regular bacteriological surveillance of sputum for 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 and include:

- Burkholderia cepacia complex (Bcc).
- Meticillin- Resistant Staphylococcus aureus (MRSA).
- Pseudomonas aeruginosa and other similar gram-negative organisms.
- Non-tuberculous mycobacteria.
- Meticillin sensitive Staphylococcus aureus.
- Haemophilus Influenza.
- Stenotrophomonas maltophilia.

2.2 Cystic fibrosis pathogens are transmitted by droplet and contact routes. Practices to contain respiratory secretions and prevent transmission must be followed with all cystic fibrosis patients. To reduce risk of transmission between CF patients, strict infection control and avoidance of patient mixing within respiratory clinics and of CF inpatients is essential.

2.3 These guidelines provide practical information regarding patient segregation, equipment decontamination and isolation procedures. Guidance on the management of specific infections (e.g. MRSA) and advice on general infection control procedures such as standard precautions and decontamination can be found in the relevant infection control policies.

Chronic sputum carriage of MRSA reduces the effectiveness of topical suppression therapy. Individual cases should be discussed with the CF Consultant, but it is generally not necessary to send the usual decontamination advice to the patient and their General Practitioner.

Patients who carry MRSA or MSSA should be prescribed standard staphylococcal suppression therapy at least 24hrs before intravenous access for a course of intravenous antibiotics to reduce the risk of bacteraemia.

3 Duties & Responsibilities

3.1 The **Chief Executive** is ultimately responsible for the content of all policies, implementation and review.

3.2 **Directors** are responsible for identifying and implementing LSW policies relevant to their area.

3.3 Document **authors** (by job title) are responsible for designing, drafting and developing policies in accordance with this policy guidance, ensuring that draft policies are circulated for appropriate consultation, and their implementation. The author is also responsible for conducting a full review of the policy either on a one yearly, two yearly or three yearly basis dependent upon the author's own risk assessment.

3.4 **Line Managers** are responsible for:

- Ensuring that all policies, new policies and changes to policies are communicated to, understood and followed by staff, including any identified training needs.

4. Management of cystic fibrosis clinics

4.1. 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 left for at least 30 minutes and then cleaned appropriately.

- Patients known to have Bcc colonisation must not attend routine CF clinics, but be seen in other non-CF clinics.

- Clinic staff including physiotherapists, dieticians, phlebotomists, ECG technicians, consultants and other medical staff will visit patients in these rooms rather than patients moving from room to room.

- Outpatients should also be advised not to wait in other communal areas such as the pharmacy waiting area or other outpatient clinics, in order to reduce risk of contact with other CF patients.

4.2. Infection control procedures

- Strict adherence to hand hygiene policy is a requirement (please refer to Hand Hygiene Policy). Staff should be 'bare-below-the-elbows', and jewellery and watches should not be worn. Hand washing and decontamination with alcohol hand gel is essential when in contact with the patient and the patient's environment. In addition , hands should be washed with soap and water at the start and end of clinical duties, when hands are visibly soiled or potentially contaminated and following the removal of gloves. Routine periodic hand decontamination with alcohol-based rub should be performed between every patient contact, or between each activity for the same patient, when hands are not visibly soiled. (Five Moments for Hand Hygiene). Gloves are advised for clinical examinations when contamination of the hands with secretions is likely.
- Aprons and gloves will be worn by staff during out-patient visits to minimise the risk of cross- infection between patients.

- Detergent wipes should be available in all the examination rooms for cleaning of multi-use items such as stethoscopes and saturation probes between patients.

- If physiotherapy takes place in the clinic, physiotherapy staff should be provided with single-use aprons and gloves that give adequate cover of clothing. The latter should be worn for providing treatment and be changed between patients.

- Spirometers must be used with a bacterial/viral filter that is changed between patients. All external surfaces, including tubing, must be decontaminated between each patient using detergent wipes.

- The trolleys used for moving equipment from room to room must be cleaned thoroughly with 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 wipes and dried after every patient.

- Nebuliser compressors must be cleaned with a detergent wipe after each patient use. Compressors should be cleaned at least once a week if not in regular use. Compressor filters should be changed between patients.

- Patients should be instructed to cough into a tissue that should be immediately discarded. Hand hygiene should be performed after coughing. Sputum

containers for specimen collection must have a lid on and should be disposed of as clinical waste daily or when full. Sputum should not be expectorated down toilets, sinks or in showers.

- 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.

5. Management of inpatients with cystic fibrosis

5.1. 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 Bcc should be admitted to an en-suite single room on a different ward to other CF patients. If two or more patients with Bcc are admitted they should be accommodated in single rooms on separate medical wards.

- 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.

5.2. Socialising

- CF patients should be asked not to socialise with other CF patients.

- CF patients should be allowed to go to non-clinical areas, such as the shop and canteen.

5.3. Room and equipment cleaning

- Single rooms occupied by CF patients must be cleaned thoroughly with detergent before admission, twice daily during admission, and after discharge. A detergent / bleach solution should be used if an enteric pathogen is suspected or confirmed.

- All ‘patient-touch’ surfaces, including bed frames, should be cleaned daily. Gram-negative bacteria survive well in a moist environment, so special care and cleaning is essential for wash bowls, nebuliser equipment etc. All items must be stored dry.

- On discharge, single rooms should have a deep clean with a detergent and bleach solution and the Ward Manager should assess the cleanliness of the fittings.

5.4. Infection control procedures

- All patients must have an Isolation Daily Review Care plan.

- All staff and visitors must decontaminate their hands before and after contact with the patient, their immediate surroundings and on leaving the room/area. All staff will adhere to the bare below the elbows rule. On ward rounds the number of people entering the room should be kept to an absolute minimum.

- Single-use plastic apron and gloves should be worn when in contact with potentially colonised skin, secretions and surroundings. They should be worn for clinical procedures, particularly those that will generate aerosols or sputum, cleaning of equipment and the environment and changing linen face mask / eye protection / visor required Aerosol Generating Procedures (AGP). use of droplet and contact precautions. (PHE Guidance on Respiratory Diseases).
- Remove and dispose of gloves prior to leaving the patient's room/area and perform hand washing with soap and water.
- Linen should be treated as infected and placed in a water-soluble bag within a red linen bag and securely fasten.

- All waste, including household, should be treated as clinical waste.

- In general, other than observing good hand hygiene practice, visitors do NOT need to follow the same precautions unless they have certain conditions (e.g. open and exuding wounds) or if they are assisting with the nursing care of a patient.

- Dedicated equipment or single-use items are preferred when possible.

5.5. Physiotherapy for patients with B. cepacia complex or MRSA

- Where possible, physiotherapy should be performed after other patients.

- For close physical contact and/or generation of cough/sputum production in patients colonised with BCC or MRSA, a long-sleeved fluid-repellent disposable gown should be worn.

- Following treatment of patient, gowns should be discarded as clinical waste. Hands should be washed thoroughly after removal of gown.

- Sufficient gowns should be obtained for the number of daily treatments and for on-call staff.

6. Other relevant policies

1. Decontamination Guidelines and Procedures (Cleaning and Disinfection) Policy.
2. Linen Policy.
3. Hand Hygiene Policy & Procedures.

4. Multi-Resistant *Staphylococcus Aureus (MRSA) Management and Control*.
5. Resistant Gram-Negative Bacteria (Management and Control of).
6. Isolation & Management of the Infected Patient.

7. Monitoring Compliance and Effectiveness

All Infection Prevention & Control policies are reviewed bi-annually and ratified through the Infection Control Committee and signed off by the Director of Infection Prevention and Control. Due consideration is given to clinical expert opinion and relevant government documents, and includes duties, process for enabling all relevant permanent staff groups, as identified in the training needs analysis, to complete Infection Prevention & Control training and details the process for monitoring the effectiveness and compliance. This information is included in the Quarterly Reviews and Annual Report provided by the Director of Infection Prevention & Control through the Infection Control Committee and LSW Board.

All policies are required to be electronically signed by the Lead Director. Proof of the electronic signature is stored in the policies database.

The Lead Director approves this document and any attached appendices. For operational policies this will be the Locality Manager.

The Executive signature is subject to the understanding that the policy owner has followed the organisation process for policy Ratification.

Signed: Lead Nurse, Director of Infection, Prevention and Control

Date: 1st March 2016