	NHS GREATER GLASGOW & CLYDE CONTROL OF INFECTION COMMITTEE STANDARD OPERATING PROCEDURE (SOP)	Page	1 of 8
		Effective From	April 2021
	IPC Precautions for patients with cystic fibrosis who have <i>Pseudomonas spp</i> and or <i>B. cepacia</i>	Review Date	April 2023
		Version	3
The most up-to-date version of this SOP can be viewed at the following website: www.nhsggc.org.uk/your-health/infection-prevention-and-control			

SOP Objective

To ensure that Cystic Fibrosis patients colonised or infected with Pseudomonas and Burkholderia species are cared for appropriately and actions are taken to minimise the risk of cross-infection.

This SOP applies to all staff employed by NHS Greater Glasgow & Clyde and locum staff on fixed term contracts and volunteer staff.


KEY CHANGES FROM THE PREVIOUS VERSION OF THIS SOP

- References updated

Document Control Summary


Approved by and date	Board Infection Control Committee 20 th April 2021
Date of Publication	23 rd April 2021
Developed by	Infection Control Policy Sub-Group
Related Documents	National IPC Manual SOP Hand Hygiene SOP Terminal Clean of Isolation Rooms SOP Twice Daily Clean of Isolation Rooms SOP Cleaning of Near Patient Equipment SOP Decontamination
Distribution/ Availability	NHSGGC Infection Prevention and Control Internet www.nhsggc.org.uk/your-health/public-health/infection-prevention-and-control/
Lead Manager	Board Infection Control Manager
Responsible Director	Board Medical Director

The most up-to-date version of this SOP can be viewed at the following website:
www.nhsggc.org.uk/your-health/infection-prevention-and-control

	NHS GREATER GLASGOW & CLYDE CONTROL OF INFECTION COMMITTEE STANDARD OPERATING PROCEDURE (SOP)	Page	2 of 8
		Effective From	April 2021
	IPC Precautions for patients with cystic fibrosis who have <i>Pseudomonas spp</i> and or <i>B. cepacia</i>	Review Date	April 2023
		Version	3
The most up-to-date version of this SOP can be viewed at the following website: www.nhsggc.org.uk/your-health/infection-prevention-and-control			

CONTENTS

1. Responsibilities	3
2. General information on Pseudomonas and Burkholderia species	4
3. Transmission Based Precautions for Pseudomonas spp and or B. cepacia.....	5
4. Evidence base	8

	NHS GREATER GLASGOW & CLYDE CONTROL OF INFECTION COMMITTEE STANDARD OPERATING PROCEDURE (SOP)	Page	3 of 8
		Effective From	April 2021
	IPC Precautions for patients with cystic fibrosis who have <i>Pseudomonas spp</i> and or <i>B. cepacia</i>	Review Date	April 2023
		Version	3
The most up-to-date version of this SOP can be viewed at the following website: www.nhsggc.org.uk/your-health/infection-prevention-and-control			

1. Responsibilities

Healthcare Workers (HCWs) must:

- Follow this SOP.
- Inform their line manager if this SOP cannot be followed.

Senior Charge Nurse (SCN) must:


- Ensure that written information is available for patients and parents / carers.
- Ensure that staff are aware of the content of this SOP.
- Support HCWs and IPCTs in following this SOP.

Managers must:

- Support HCWs and Infection Control Teams (IPCTs) in following this SOP.
- Cascade new SOPs to clinical staff after approval by the Board Infection Control Committee (BICC).


Infection Prevention and Control Teams (IPCTs) must:

- Keep this SOP up-to-date.
- Provide education opportunities on this SOP.
- Monitor epidemiology of *Pseudomonas* and *Burkholderia sp* and advise on infection control precautions as necessary.

	NHS GREATER GLASGOW & CLYDE CONTROL OF INFECTION COMMITTEE STANDARD OPERATING PROCEDURE (SOP)	Page	4 of 8
		Effective From	April 2021
	IPC Precautions for patients with cystic fibrosis who have <i>Pseudomonas spp</i> and or <i>B. cepacia</i>	Review Date	April 2023
		Version	3
The most up-to-date version of this SOP can be viewed at the following website: www.nhsggc.org.uk/your-health/infection-prevention-and-control			


2. General information on Pseudomonas and Burkholderia species

<i>The Organisms</i>	<p>Pseudomonas aeruginosa <i>P. aeruginosa</i> infection is common in people with cystic fibrosis, and chronic infection can be associated with a decline in pulmonary function and a worse prognosis. <i>P. aeruginosa</i> can be acquired from other people with cystic fibrosis as well as from environmental sources.</p> <p>Burkholderia cepacia complex (Bcc) <i>Burkholderia species</i> are found naturally in soil around plant roots, rivers and lake sediments. Some strains of <i>Burkholderia</i> can be transmitted person to person. <i>Burkholderia cepacia</i> complex infection is associated with an increased morbidity and shortened life-expectancy for people with cystic fibrosis.</p>
<i>Mode of spread</i>	Direct or indirect contact with environment/equipment. Likely droplet.
<i>Case definition</i>	<p><u><i>Pseudomonas sp</i></u> Any patient testing positive for Pseudomonas in any respiratory culture</p> <p><u><i>Burkholderia cepacia</i></u> Any patient testing positive for <i>Burkholderia cepacia</i> in any respiratory culture</p>

	NHS GREATER GLASGOW & CLYDE CONTROL OF INFECTION COMMITTEE STANDARD OPERATING PROCEDURE (SOP)	Page	5 of 8
		Effective From	April 2021
	IPC Precautions for patients with cystic fibrosis who have <i>Pseudomonas spp</i> and or <i>B. cepacia</i>	Review Date	April 2023
		Version	3
The most up-to-date version of this SOP can be viewed at the following website: www.nhsggc.org.uk/your-health/infection-prevention-and-control			


3. Transmission Based Precautions for *Pseudomonas spp* and or *B. cepacia*

Accommodation (Patient Placement)	<p>All patients must be isolated in a single room with ensuite facilities and transmission based precautions in place. The door should remain closed. Patients should be placed in the designated wards in QEUH or in Royal Hospital for Children for CF patients with either <i>Pseudomonas spp</i> and / or <i>B cepacia</i>. Where possible, all other treatments and procedures while an in-patient should be conducted in this room.</p> <p>Outpatient appointments must be scheduled where patients with CF who are colonised/infected with different pathogens are seen at different clinic sessions e.g. morning or afternoon or a different day.</p> <p>Patients (all ages) with CF should not be taken to Hospital Group Activities or communal patient areas such as medicinema, play areas (including within the RHC Atrium), school room, Radio Lollipop, shops, coffee bars or restaurants, etc.</p>
Patient environment	<p><u>Hospital Inpatient setting</u></p> <p>Domestic staff should be informed by the nurse in charge of the ward if there is a patient in isolation/ bed space that requires twice daily cleaning.</p> <p>Follow recommendations in NHSGGC SOP Twice Daily Clean of Isolation Rooms for cleaning of reusable patient equipment and environmental.</p> <p><u>Outpatient clinics</u></p> <p>Clinic rooms should be cleaned as soon as possible after use (or before being used for a patient with CF), with 1,000 ppm chlorine based detergent</p>
Reusable patient Equipment	<p>Single use items should be used where possible and these items disposed of between patients. Reusable respiratory and other equipment should be single patient dedicated as far as possible</p>


	NHS GREATER GLASGOW & CLYDE CONTROL OF INFECTION COMMITTEE STANDARD OPERATING PROCEDURE (SOP)	Page	6 of 8
		Effective From	April 2021
	IPC Precautions for patients with cystic fibrosis who have <i>Pseudomonas spp</i> and or <i>B. cepacia</i>	Review Date	April 2023
		Version	3
The most up-to-date version of this SOP can be viewed at the following website: www.nhsggc.org.uk/your-health/infection-prevention-and-control			

	<p>e.g. peak flow meters, spirometers, stethoscopes as long as cleaning is undertaken after each use. *</p> <p>Fans should not be used within patient rooms. If used for individual patients a risk assessment should be in place, including a review date, and included in daily cleaning schedule</p> <p>If trolleys are used for transporting equipment between rooms they should be cleaned prior to the clinic and between patients using 1000ppm chlorine based detergent.</p> <ul style="list-style-type: none"> • NHSGGC SOP Cleaning of Near Patient Equipment • NHSGGC Decontamination SOP <p>*Please refer to NHSGGC decontamination SOPs for individual items of respiratory equipment.</p>
Hand Hygiene	<p>Hands must be decontaminated before and after each direct patient contact, after contact with the environment after exposure to body fluids, e.g. respiratory droplets, and before any aseptic tasks.</p> <p>Patients, visitors and relatives should be encouraged to carry out thorough hand hygiene, especially after episodes of coughing / sputum induction.</p>
Moving between wards, hospitals and departments (including theatres)	<p>Patients colonised with <i>Pseudomonas aeruginosa</i> and or <i>B cepacia</i>, should not attend other departments at the same time as other CF patients.</p>
Patient Clothing	<p>If parents or carers take personal clothing home, staff must place soiled clothing into a patient clothing bag. Staff must also provide a NHSGGC Home Laundry Information Leaflet.</p>
Personal Protective Equipment (PPE)	<p>Where there is a risk of contact with blood and or body fluids, staff should wear disposable plastic apron and gloves.</p> <p><u>Fluid Resistant Surgical Mask must be used if splashing or spraying of blood, body fluids, secretions or excretions onto respiratory mucosa (nose and mouth) is anticipated/likely.</u></p>

The most up-to-date version of this SOP can be viewed at the following website:
www.nhsggc.org.uk/your-health/infection-prevention-and-control

	NHS GREATER GLASGOW & CLYDE CONTROL OF INFECTION COMMITTEE STANDARD OPERATING PROCEDURE (SOP)	Page	7 of 8
		Effective From	April 2021
	IPC Precautions for patients with cystic fibrosis who have <i>Pseudomonas spp</i> and or <i>B. cepacia</i>	Review Date	April 2023
		Version	3
The most up-to-date version of this SOP can be viewed at the following website: www.nhsggc.org.uk/your-health/infection-prevention-and-control			

	Healthcare workers should wear FFP3 respirators when caring for CF patients under airborne precautions (e.g. performing AGPs).
Terminal Cleaning of Room	A terminal clean of the patient's room should be undertaken on departure of patient. If an AGP has just been undertaken prior to departure, the room should be left for the appropriate fallow time dependant on the air changes in the room. Please refer to NHS GGC SOP Terminal clean of isolation rooms
Visitors	Visitors who have Cystic Fibrosis and who do not attend RHC or QEUH CF wards should not visit any patient with CF within RHC or QEUH (excluding family members). Patients' siblings who have CF and who currently attend RHC CF Unit may be allowed to visit after discussion with the CF Nurse Specialists.

	NHS GREATER GLASGOW & CLYDE CONTROL OF INFECTION COMMITTEE STANDARD OPERATING PROCEDURE (SOP)	Page	8 of 8
		Effective From	April 2021
	IPC Precautions for patients with cystic fibrosis who have <i>Pseudomonas spp</i> and or <i>B. cepacia</i>	Review Date	April 2023
		Version	3
The most up-to-date version of this SOP can be viewed at the following website: www.nhsggc.org.uk/your-health/infection-prevention-and-control			

4. Evidence base

HPS (2018) NIPCM Cystic Fibrosis Literature Review: Infection Prevention and Control for patients with Cystic Fibrosis

CF Trust our focus *Mycobacterium abscessus* Recommendations for Infection Prevention and Control (2017)

CF Trust Cross-infection policy (2015)

CF Trust 2004 The Burkholderia cepacia complex, suggestions for prevention and infection Control

Cystic Fibrosis Foundation Guidelines

Infection Prevention and Control Guideline for Cystic Fibrosis 2013 Update

Saiman et al Infection Control and Hospital Epidemiology 2014: 35 S1

UK CF Trust Infection Control Group (2004) Pseudomonas aeruginosa infection in people with cystic fibrosis. CF Trust.