

Page 1 of 17 Effective October From 2025 Review October Date 2027 Version 5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

The most up-to-date version of this SOP can be viewed at the following web page: www.nhsggc.scot/hospitals-services/services-a-to-z/infection-prevention-and-control

SOP Objective

To provide Healthcare Workers (HCW) with details of the care required to prevent cross-infection in children with *Clostridioides difficile* Infection (CDI).

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 POLICY

Important Note: The version of this policy found on the Infection Prevention & Control (eIPC Manual) on the intranet page is the <u>only</u> version that is controlled. Any other versions either printed or embedded into other documents or web pages should be viewed as uncontrolled and as such may not necessarily contain the latest updates, amendments, or linkages to other documents.

Document Control Summary

Approved by and date	Board Infection Control Committee 20 th October 2025
Date of Publication	20 th October 2025
Developed by	Infection Control Policy Sub-Group
Related Documents	National Infection Prevention and Control Manual
	NHSGGC SOP CDI (Adults)
	NHSGGC Hand Hygiene Guidance
	NHSGGC Outbreak Incident Management Plan
	NHSGGC SOP Cleaning of Near Patient Equipment
	NHSGGC SOP Terminal Clean of Ward/Isolation Rooms
	NHSGGC SOP Twice daily Clean of Isolation Rooms
	Antimicrobial Prescribing Policies
Distribution/ Availability	NHSGGC Infection Prevention and Control web page:
	www.nhsggc.scot/hospitals-services/services-a-to-z/infection-
	<u>prevention-and-control</u>
Lead Manager	Director Infection Prevention and Control
Responsible Director	Executive Director of Nursing



Page	2 of 17
Effective	October
From	2025
Review	October
Date	2027
Version	5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

The most up-to-date version of this SOP can be viewed at the following web page: www.nhsggc.scot/hospitals-services/services-a-to-z/infection-prevention-and-control

CONTENTS

CDI	Paediatric Aide Memoire	3
1.	Responsibilities	4
2.	General Information on <i>Clostridioides difficile</i> Infection (CDI)	6
3.	Transmission Based Precautions for CDI	8
4.	Evidence Base	16
	pendix 1 – Rowel Movement Record	



Page 3 of 17 Effective October From 2025 Review October Date 2027 Version 5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

The most up-to-date version of this SOP can be viewed at the following web page: www.nhsggc.scot/hospitals-services/services-a-to-z/infection-prevention-and-control

CDI Paediatric Aide Memoire

Consult SOP and isolate in a single room with:

- ✓ ensuite / own commode
- √ door closed
- ✓ IPC yellow sign on door
- ✓ dedicated equipment
- ✓ Bowel Movement Record
- ✓ Care Checklist completed daily
- ✓ Daily Severity scoring to be completed by medical staff



Patient has been asymptomatic for >48 hours and bowel movements have returned to patients normal



- ✓ Undertake terminal clean of room
- ✓ Stop isolation
- ✓ Continue stool chart until discharge

SOP - Guidelines for patients in isolation:

<u>Hand Hygiene:</u> Liquid Soap and Water

PPE: Disposable gloves and yellow apron

<u>Patient Environment:</u> Twice daily chlorine clean

<u>Patient Equipment:</u> Chlorine clean after use and at least on a twice daily basis

Linen: Treat as infectious

<u>Waste:</u> Dispose of as Clinical / Healthcare waste

Incubation Period: up to 12 weeks

Period of Communicability: until 48 hours asymptomatic and a normal stool passed

Notifiable disease: Yes

<u>Transmission route:</u> direct, indirect contact



Page 4 of 17 Effective October From 2025 Review October Date 2027 Version 5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

The most up-to-date version of this SOP can be viewed at the following web page: www.nhsggc.scot/hospitals-services/services-a-to-z/infection-prevention-and-control

1. Responsibilities

Healthcare Workers (HCWs) must:

Follow this SOP.

Commence a CDI Care Checklist while patient is symptomatic, update daily and complete the failure to isolate risk assessment for any aspect of transmission based precautions (TBP) for CDI that cannot be implemented

Clostridioides Difficile – IPC Care checklist

- Inform their line manager and a member of the Infection Prevention and Control Team if this SOP cannot be followed.
- Provide written and verbal information on CDI for patients and their relatives as appropriate

Clostridioides Difficile Fact Sheet

Senior Charge Nurse (SCN) must:

- Ensure that the IPC Care checklist is in place while patient is deemed infectious/symptomatic.
- Ensure that written information is provided / available for patients and relatives.
- Ensure a failure to isolate risk assessment is in place if any aspect of TBPs for CDI cannot be implemented

Managers must:

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



Page	5 01 17
Effective	October
From	2025
Review	October
Date	2027
Version	5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

The most up-to-date version of this SOP can be viewed at the following web page: www.nhsggc.scot/hospitals-services/services-a-to-z/infection-prevention-and-control

Infection Prevention and Control Teams (IPCTs) must:

- Keep this SOP up-to-date.
- Provide education opportunities on this SOP.
- Monitor epidemiology of Clostridioides difficile Infection (CDI) within healthcare facility(ies) and advise on infection prevention and control precautions as necessary.
- Advise and support HCWs to undertake a Failure to Isolate Risk Assessment if unable to follow this SOP.

Occupational Health Service (OHS) must:

 Advise HCW regarding possible infection exposure and return to work issues as necessary



Page 6 of 17

Effective October
From 2025

Review October
Date 2027

Version 5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

The most up-to-date version of this SOP can be viewed at the following web page: www.nhsggc.scot/hospitals-services/services-a-to-z/infection-prevention-and-control

2. General Information on Clostridioides difficile Infection (CDI)

T	Clostridioides difficile Infection (CDI)
Communicable Disease/ Alert Organism	Clostridioides difficile is a Gram positive, anaerobic, spore forming, toxin producing gastrointestinal bacillus. Recent studies have shown that <i>C. difficile</i> is an emerging pathogen in the paediatric setting, causing a range of illness; from mild diarrhoea to life changing conditions such as pseudomembranous colitis, toxic megacolon, intestinal perforation and septic shock. It is imperative that clinical judgement is exercised in order that aetiologies are appropriately investigated.
Case Definition	 A child (3-16 years of age) has a diagnosis of CDI if they have a stool specimen positive for CD toxin, diarrhoea (Bowel Movement Record 6-7) and one or more of the following: Significant co-morbidities i.e. haematology/oncology; gastrointestinal Severe GI disease with bloody diarrhoea and an unlikely alternative diagnosis Antibiotic therapy in the last 4 weeks (especially ciprofloxacin) Strong clinical suspicion
Case Definition : Determination of source	Hospital acquired CDI is defined as a CDI case with onset of symptoms at least 48 hours (> 48 hours) following admission to a hospital. Healthcare associated CDI is defined as a CDI case with onset of symptoms within 4 weeks following discharge from a hospital. Indeterminate cases of CDI are defined as a patient who was discharged from a hospital 4–12 weeks before the onset of symptoms. Community associated CDI Is defined as a patient with onset of symptoms while outside a hospital and without discharge



Page 7 of 17 Effective October From 2025 Review October Date 2027 Version 5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

	from a hospital within the previous 12 weeks – or with onset of symptoms within 48 hours following admission to a hospital without stay in a hospital within the previous 12 weeks.
Mode of Spread	There is evidence of both direct and indirect spread through the hands of HCWs and patients, and environmental contamination via equipment and instruments, e.g. commodes, bedpans and washbowls. C. difficile produces spores which can survive for long periods in the environment. Environmental cleaning is paramount.
Incubation Period	The precise incubation period is not well defined but can be up to 12 weeks.



Page 8 of 17 Effective October From 2025 Review October Date 2027 Version 5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

The most up-to-date version of this SOP can be viewed at the following web page: www.nhsggc.scot/hospitals-services/services-a-to-z/infection-prevention-and-control

3. Transmission Based Precautions for CDI

Accommodation (Patient Placement)	The patient should be placed in a single room, preferably with ensuite or own commode. The door to the room should be closed when not in use and a yellow IPCT sign placed on the door. If a side room is unavailable the IPCT will help the clinical team to undertake a risk assessment and advise where to nurse the patient. Precautions should continue until the patient has been asymptomatic for 48 hours and bowel movements have returned to normal or, on the advice of a member of the IPCT.
Care Checklist available	Yes. CDI Care Checklist
Clinical/ Healthcare Waste	All non-sharps waste should be designated as Healthcare/Clinical Waste (HCW) and placed in an orange clinical waste bag within the room. Please refer to the



Page	9 of 17
Effective	October
From	2025
Review	October
Date	2027
Version	5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

Equipment	Patient equipment, e.g. commode, BP cuff, should be allocated to the patient until no longer considered infectious. Consider single-use or single patient use equipment. Other equipment including Commodes should be decontaminated after each use with chlorine based detergent, as per manufacturer's instructions. Twice Daily Clean of Isolation Rooms SOP
Hand Hygiene	Alcohol gel hand rub and chlorhexidine are <u>not</u> effective against CDI: Soap and water must be used for all patients with loose stools.
	Hand hygiene is the single most important measure to prevent cross infection with CDI. Hands must be decontaminated before and after each direct patient contact, after contact with the environment, after exposure to body fluids and before any aseptic tasks. Patients should be encouraged to carry out thorough hand hygiene. If a child is unable to decontaminate their hands then hand hygiene should be carried out by a HCW or patient carer for them.
	Please refer to NHSGGC Hand Hygiene Guidance
	Visitors should also be instructed to wash their hands with soap and water
ARHAI Trigger Tool	The ARHAI Trigger Tool must be completed by the IPCT and Clinical Staff if there are two or more HAI CDI cases in the same ward in a two week period. IPCNs and ward staff will complete the trigger tool checklist daily until it is no longer required as advised by IPCT.
	Findings will be reported to the SCN and ward staff who should liaise with IPC and pharmacy colleagues on any actions required as a result.



Page	10 of 17
Effective	October
From	2025
Review	October
Date	2027
Version	5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

Linen	Treat used linen as infectious, i.e. place in a water soluble bag then into a clear plastic bag (place water soluble bag in the brown plastic bags used in Mental Health Areas), tied then into a red laundry hamper bag. Please refer to National Guidance on the safe management of linen.
Moving between wards, hospitals and departments (including theatres)	Except in clinical emergencies, transfer of patients before they are symptom-free for 48-hours and/or and passed a normal stool is not advisable.
	However, acute receiving units have a high patient turnover and transfer of patients is necessary for effective patient flow and to ensure that patients receive the appropriate care within their specialty. Therefore, Receiving areas MUST be informed of the patient's condition before the patient is transferred and the requirement for a single room. Please follow MHSGGC SOP Terminal Clean of Ward/Isolation Rooms



Page 11 of 17 Effective October 7025 Review October 2027 Version 5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

Notice for Door	The yellow IPC isolation sign must be placed on the door to the patient's room.
	In Mental Health Services (MHS), on advice of IPCT.
Patient Clothing	If relatives or carers wish to take personal clothing home, staff must place clothing into a domestic water soluble bag then into a patient clothing bag and staff must ensure that a Washing Clothes at Home Patient Information Leaflet is issued.
	NB: It should be recorded in the nursing notes that both the advice and information leaflet has been issued.
Patient Information	Inform the patient and / or if relevant, the patient's relative/carer of their condition and the necessary precautions if required. Answer any questions and concerns they may have. A CDI Fact sheet for patients and their relatives is available to download from the IPCT web page.
	NB: It should be recorded in the nursing notes or Care Checklist that the fact sheet has been issued.
	<u>CDI Fact Sheet</u>
Personal Protective Equipment (PPE)	To prevent spread through direct contact PPE (disposable gloves and yellow apron) must be worn for all direct contact with the patient or the patient's environment/equipment. If there is a risk of splashing of blood/body fluids, then facial protection i.e. mask/visor should also be considered. Hand hygiene must be performed using liquid soap and water before donning and after doffing PPE. Alcohol based hand rub is not effective against CDI.
Precautions required until	Precautions should continue until the patient has been asymptomatic for 48 hours and bowel movements have returned to the patient's normal or, on advice of a member of the IPCT. If symptoms recur, reinstate precautions immediately, send further specimens and inform a member of the IPCT.
Daily and weekly check by IPCT	IPCNs will check daily (Monday -Friday) on the condition of patients with CDI until TBPs are no longer required and thereafter weekly for 4 weeks.



Page	12 of 17
Effective	October
From	2025
Review	October
Date	2027
Version	5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

The most up-to-date version of this SOP can be viewed at the following web page: www.nhsggc.scot/hospitals-services/services-a-to-z/infection-prevention-and-control

Daily assessment of severity by clinical team

If the patient is confirmed as CDI, and while the patient is symptomatic of loose stools, medical staff are required to undertake a daily severity assessment using the assessment tool below. Daily severity assessments should continue until patient has been asymptomatic for more than 48 hours and bowel movements have returned to normal. Medical staff should consider the need to take bloods to complete the severity score.

Severity assessment in paediatric population (3-16 years)

Criteria	Yes	No	Score if
			Yes
Diarrhoea >5 times per day			1
Abdominal pain and discomfort			1
Rising white cell count			1
Raised C-reactive protein			1
Pyrexia >38 ℃			1
Evidence of pseudo membranous colitis			2
Intensive care unit requirement			2
Total score			

≥ 5 = severe disease

If a patient is assessed as severe the IPCT will:

- refer to the CDI treatment algorithm (paeds)
- Communicate severe cases to the Senior
 Management Team/ Microbiology and Clinical Teams
- IPCT will generate a Datix

Clinical review assessment (CRA) and Reporting of Severe Cases of CDI

A Clinical Review is required if the patient:

- Has severe or life threatening CDI
- Was admitted to ITU for treatment of CDI or its complications
- Had endoscopic diagnosis of pseudomembranous colitis with or without toxin confirmation
- Had surgery for the complications of CDI (toxic megacolon, perforation or refractory colitis)
- Died within 30 days following a diagnosis of CDI where it is recorded as either the primary or a major contributory factor on the death certificate



Page 13 of 17 Effective October From 2025 Review October Date 2027 Version 5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

	 Had persisting CDI where the patient has remained symptomatic and toxin positive despite two courses of appropriate therapy
Deaths due to CDI (Underlying or Contributing)	If death occurs then please see the Adult CDI Guideline for the process to be followed. CDI (adult) SOP



Page 14 of 17 Effective October From 2025 Review October Date 2027 Version 5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

Treatment	www.clinicalguidelines.scot.nhs.uk/nhsggc-
	guidelines/nhsggc-guidelines/microbiology/clostridioides-
	clostridium-difficile-infection-cdi-in-children-diagnosis-and-
	<u>management</u>
Specimens required	Send faecal specimens from any patient who has loose stools that score 6-7 on Bowel Movement Record (Appendix 1) and if no other cause of diarrhoea is known. If negative and loose stools persist, another two samples should be sent at 24-hour intervals. Relevant clinical information must be supplied with the specimen.
	There is no requirement to send clearance specimens from patients who become asymptomatic.
	Specimens should not be sent whilst patient is on treatment.
	Only when a relapse of CDI is suspected should you repeat
	the toxin testing and exclude other potential causes of
	diarrhoea, and only after 14 days of treatment. Relapse can
	also occur up to 14 days after therapy has stopped.
Stool Charts	It is the responsibility of staff looking after the patient within
Stool Charts	the area to record signs and symptoms of infection as
	appropriate, e.g. Bowel Movement Record, Appendix 1. The
	date, time, size and nature of the stool should be recorded
	while symptomatic and continued until discharge in order to
	reduce the risk of cross infection.
Surveillance	Surveillance of CDI is mandatory in Scotland and is reported to HPS by the Diagnostic Laboratory.
	Local surveillance in NHSGGC is returned to wards with a
	prevalence of CDI monthly using Statistical Process Control
	Charts (SPCs). SPCs are not a substitute for local referral by
	clinical staff and ICTs but should be used to monitor trends
	and promote quality improvement.
Terminal Cleaning of	Follow SOP for Terminal Clean of Isolation Rooms. If isolation
Terminal Cleaning of Room	is discontinued and the patient remains in hospital, consider
Nooni	moving the patient to a new bed-space. This will allow the
	moving the patient to a new sea space. This will allow the



Page	15 of 17
Effective	October
From	2025
Review	October
Date	2027
Version	5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

	patient's bed, bed locker and bed table to be decontaminated thoroughly. These items can be expected, without cleaning, to remain contaminated. **NB:* relapse and re-infection from the environment can be as high as 20% in patients with CDI.
	See NHSGGC SOP Terminal Clean of Ward/Isolation Rooms
Visitors	Visitors are not required to wear aprons and gloves unless participating in patient care. If PPE is worn by visitors it should be removed before leaving the room. Visitors should be advised to decontaminate their hands with liquid soap and water on leaving the room/ patient. Visitors should also be advised not to use communal areas while patient is infectious.



Page	16 of 17
Effective	October
From	2025
Review	October
Date	2027
Version	5

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

The most up-to-date version of this SOP can be viewed at the following web page: www.nhsggc.scot/hospitals-services/services-a-to-z/infection-prevention-and-control

4. Evidence Base

Pai S et al. Five years experience of clostridium difficile infection in children at a UK tertiary hospital: proposed criteria for diagnosis and management. PLOS 2012; 71-6

Lees E A et al. The role of Clostridium difficile in the paediatric and neonatal gut — a narrative review. Eur J Clin Microbiol Infect Dis (2016) 35:1047-1057

http://www.nipcm.hps.scot.nhs.uk/

https://www.hps.scot.nhs.uk/web-resources-container/guidance-on-prevention-and-control-of-clostridium-difficile -infection-cdi-in-health-and-social-care-settings-in-scotland/



Page 17 of 17

Effective October From 2025

Review October Date 2027

Clostridioides difficile Infection (CDI) in Children (3 -16 years) STANDARD OPERATING PROCEDURE

Version 5

Month:

Year:

The most up-to-date version of this SOP can be viewed at the following web page: www.nhsggc.scot/hospitals-services/services-a-to-z/infection-prevention-and-control

Appendix 1 – Bowel Movement Record (adapted from the Bristol Stool Scale)

BOWEL MOVEMENT RECORD

					-	,	1		_	
Date	Time	Size S-small M-medium L-large S M L	Type 1 Separate hard lumps like nuts (hard to pass)	Type 2 Sausage shaped but lumpy	Type 3 Like a sausage but with cracks on surface	Type 4 Like a sausage or snake, smooth and soft	Type 5 Soft blobs with clear- cut edges (passed easily)	Type 6 Fluffy pieces with ragged edges, a mushy stool	Type 7 Watery, no solid pieces (entirely liquid)	Staff Initials
	am									
	pm									
	am									
	pm								-2	_
	am	I			l	1	1			
	pm		3							-
	am						l i			
	pm	_		-		 			-	_
	am pm	I			l	1	1			
	am					1	l -			_
	pm									
	am								-	1
	pm				l.	I.			l.	
	am								15	
	pm								23	
	am									
	pm									
	am								12	
	pm									
	am									
	pm		2						is a second	
	am									
	pm									
	am				I					

Adapted from the Bristol Stool Scale developed by KW Heaton and SJ Lewis at the University of Bristol, 1997