

Policy Title:	Management of <i>Clostridioides difficile</i> Infection	
Applies To:	All Nova Scotia Health Team Members	
Location Applicability:	All Nova Scotia Health Zones and Sites	
Related Procedure(s):	IPC-RP-001 Routine Practices and Additional Precautions IPC-RP-005 Routine Practices IPC-RP-010 Contact Precautions IPC-RP-015 Droplet Precautions IPC-CD-001 Outbreak Management IPC-RP-020 Hand Hygiene	
Approved:	Effective:	Next Review:
October 13, 2022	October 14, 2022	October 13, 2026
Sponsor:	Senior Director, Quality Improvement & Safety	
Approval Authority:	Vice President, Medicine	
Number: IPC-ARO-005	Manual:	Infection Prevention and Control

PURPOSE

The purpose of this policy is to outline the Routine Practices and Additional Precautions required when a patient/client/resident is diagnosed with a *Clostridioides difficile* (*C. difficile*) Infection (CDI).

POLICY STATEMENTS

1. Contact Precautions must be initiated by clinical care providers for a patient:
 - 1.1. At the onset of diarrhea.
 - 1.2. When there is a suspected or confirmed case of *Clostridioides difficile* (*C. difficile*) Infection (CDI).
 - 1.3. When there is toxic megacolon and pseudomembranous colitis even in the absence of a positive test result for *C. difficile*.

2. Discontinuation of Contact Precautions for patients with CDI must be done in consultation with the Infection Prevention and Control (IPAC) team: Patient will have 48-72 hours without diarrhea or return to baseline bowel habits.

NOTE: In the immune compromised patient population, precautions may remain in place for a longer period, usually until treatment course is complete.

3. Repeat stool samples for *C. difficile* testing must not be used to determine the removal of Contact Precautions or for testing the success of treatment.
4. An approved sporicidal agent must be used for daily and terminal cleaning of all rooms where CDI is suspected, has been identified by laboratory testing, or until CDI is ruled out.

PRINCIPLES AND VALUES

- Nova Scotia Health is committed to preventing the transmission of microorganisms to patients/clients/residents, visitors, essential care partners, and team members.
- *C. difficile* is the most frequent cause of healthcare-associated infectious diarrhea in Canada and is associated with increased morbidity and mortality.
- *C. difficile* infection is strongly associated with previous antibiotic use. The prevention of *C. difficile* in health care settings is dependent upon appropriate use of antimicrobial therapy (i.e., antimicrobial stewardship).
- *C. difficile* is a spore-forming organism which persists for a long time in the environment and resists routine disinfection processes. Contaminated hands of team members and environmental contamination contribute to *C. difficile* transmission in health care settings.
- The treatment and termination of healthcare associated *C. difficile* involves appropriate use of antimicrobial therapy (i.e., antimicrobial stewardship), stringent application of additional IPAC precautions and the use of specialized cleaning procedures.
- Sustained control of CDI is achieved with IPAC measures.

PROCEDURE

1. Place patient in a single room with a dedicated bathroom and patient care equipment.

NOTE: Priority for a single room is given to patients who are incontinent or at risk of contaminating their environment

2. If a single room is not available:
 - 2.1. Consult with IPAC regarding cohorting with other patients.
 - 2.2. The patient is not to use the bathroom used by other patients.
 - 2.3. Designate a commode for use at the patient's bedside.

2.4. Commodes and bedpans are emptied in the soiled utility room, not into the toilet in the shared patient bathroom.

3. When bedpans or commodes are required:

3.1. Handle in such a way to avoid contamination of the environment with *C. difficile* spores.

3.2. Wear the appropriate personal protective equipment during the disposal process: gloves, gown, and facial protection (i.e., mask and goggles, or face shield).

3.3. Cover the bedpan or commode pan/bucket for transport to the soiled utility room.

3.4. Empty bedpans or commode pan/bucket into the hopper. Use a dedicated toilet brush to clean. Do not use spray wands. If available use a flusher/disinfector or macerator system.

3.5. When precautions are discontinued, clean and disinfect or sterilize the commodes and bedpans using a sporicidal agent.

NOTE: Disposable bedpan and commode liners (hygienic bags) are available in many clinical areas to assist in waste management.

4. Post [Contact Precautions \(+\) Signage](#) as per protocol

5. Document patient symptoms and stool patterns. See [Appendix B](#) for Bristol Stool Chart to assist in documenting type and consistency.

6. Interdisciplinary communication regarding *C. difficile* precautions must occur. This happens through various strategies such as: patient safety huddles, chart flags/notifications, signage, verbal communication, etc.

7. Perform hand hygiene before entering the patient's room or bed space.

8. Perform a point-of-care risk assessment (PCRA) to determine if personal protective equipment (PPE) is required:

8.1. Wear gloves when hands will have contact with the patient, touch surfaces or objects that come in contact with the patient. Most encounters with the patient will require this type of PPE.

8.2. Wear a gown when clothing will have direct contact with the patient or touch surfaces or objects that come in contact with the patient.

9. Dedicate or use disposable patient care equipment such as thermometers, blood pressure cuffs, glucometers, etc. Any equipment that cannot be dedicated is to be cleaned and disinfected with a sporicidal agent between patients.

10. On room exit and between patients, wash hands with soap and water. Alcohol-based hand rub (ABHR) is not as effective on *C. difficile* spores.

10.1. Use a dedicated hand hygiene sink. Do not use the sink in the patient's bathroom (to prevent re-contamination of hands).

- 10.2. If a dedicated hand hygiene sink is not immediately accessible, perform hand hygiene using ABHR upon exiting the room or bedspace and proceed to the closest hand hygiene sink.
 11. Patients should leave their rooms for medical purposes only. The patient suspected or confirmed to have CDI that needs to leave their room, is provided with clean clothes and performs hand hygiene with soap and water. Provide supervision/assistance as necessary.
 12. Educate the patient, Essential Care Partners, and visitors on proper hand hygiene and Contact Precautions.
 - 12.1. When patient is unable to perform hand hygiene independently, assist as required.
 - 12.2. Educate the patient on the importance of performing hand hygiene upon leaving their room and especially after using the toileting facilities (using soap and water).
 13. Twice daily and terminal cleaning of the patient/resident room and bathroom by Environmental Services (ES) is done as an enteric clean using a hospital-approved sporicidal agent.
 - 13.1. Notify ES of the need for an enteric clean. Each unit will develop a method of communication.
 - 13.2. ES cleans and disinfects the patient room, patient bed space and bathroom twice daily.
- NOTE:** In some areas of NSH, the unit team members clean the patient bed space with a sporicidal agent (i.e., bedside tables, bed rails, etc.).
14. Communicate with ES when the patient is discharged or Contact Precautions can be discontinued.
 - 14.1. When Contact Precautions are discontinued, a terminal clean is required even if the patient is not discharged.
 - 14.2. In cases where precautions are being discontinued, patients are removed from the room while cleaning is taking place (if condition allows).
 - 14.3. The patient is to be bathed and dressed in clean bedclothes or personal clothing before re-admission to the room.
 - 14.4. Once terminal cleaning of the room is complete (see [Appendix C](#) for details), team members remove the Contact Precautions signage.
 - 14.5. Soiled laundry, dietary trays, and waste are handled as per Routine Practices.
 15. Communicate the need for additional precautions to receiving units on transfer.

REFERENCES

CDI Working Groups of British Columbia. (2013). British Columbia Clostridium difficile infection (CDI) (Placeholder1) toolkit and clinical management algorithm. *Provincial*

Infection Control Network of British Columbia. <http://www.picnet.ca/wp-content/uploads/Toolkit-for-Management-of-CDI-in-Acute-Care-Settings-2013.pdf>

Infection Control and Hospital Epidemiology. (2014). Strategies to prevent Clostridium difficile infections in acute care hospitals: 2014 update. *SHEA/IDSA Practice recommendations, Vol. 35* (6):628-645. <http://dx.doi.org/10.1086/676023>

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Public Health Agency of Canada. (2016). *Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings* <https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/diseases-conditions/routine-practices-precautions-healthcare-associated-infections/routine-practices-precautions-healthcare-associated-infections-2016-FINAL-eng.pdf>

POLICIES

[IPC-RP-001 Routine Practices and Additional Precautions](#)

[IPC-RP-005 Routine Practices](#)

[IPC-RP-010 Contact Precautions](#)

[IPC-RP-015 Droplet Precautions](#)

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[IPC-CD-001 Outbreak Management](#)

[IPC-RP-020 Hand Hygiene](#)

Patient Teaching Pamphlet

[Clostridioides difficile \(C. diff\)](#)

[Hand Hygiene](#)

Videos

[Essential Care Partners in Acute Care](#)

Appendices

[Appendix A - Definitions](#)

[Appendix B - Bristol Stool Chart](#)

[Appendix C - Environmental Cleaning and Disinfection for Clostridioides difficile infection \(CDI\)](#)








Appendix A: Definitions

Clostridioides difficile	<p>A bacterium that causes diarrhea and more serious intestinal conditions such as colitis. It is shed in feces.</p> <p>It is a spore-forming, gram positive anaerobic bacillus that produces two endotoxins: toxin A and toxin B which cause inflammation and mucosal damage.</p> <p>Symptoms of <i>C. difficile</i> infection include foul smelling, watery stools that may be accompanied by fever, abdominal pain and increased white blood cell count. (PHAC, 2012).</p>
Clinical Care Provider	Any person who delivers clinical care to a client, patient, or resident.
Contact Precautions	Contact Precautions are measures implemented to prevent transmission of infectious agents, which are spread by direct or indirect contact with the patient or the patient's environment.
Contact Precautions (+)	Contact Precautions with the addition of an Enteric Clean.
Diarrhea	<p>3 or more watery stools in a 24-hour period that is new and unusual for the patient.</p> <p>Diarrhea is liquid stool- if poured into a container it would conform to the shape of the container.</p>
Enteric Clean	Specific cleaning methods for illnesses of the GI tract such as norovirus, <i>C. difficile</i> , etc. It involves the use of a sporicidal agent (bleach or accelerated hydrogen peroxide-based products). There is an increased frequency of cleaning within the patient environment, with a focus on high touch surfaces and toileting facilities.
Essential Care Partner	An essential care partner is a person who provides physical, psychological, and emotional support, as deemed important by a patient, resident, or client. (Healthcare Excellence Canada, 2021)
Patient	Denotes all persons receiving care or service from or through NSH including but not limited to clients, inpatients, outpatients, residents, and Veterans who reside in, are cared for, and received health care service through any NSH facilities, programs, or services. For the purpose of this document, 'patient' means patient, or, if the patient is incapacitated, the substitute decision-maker.
Team Members	Unless specifically limited in a specific Policy, refers to all employees, physicians, learners, volunteers, board members, contractors, contract workers, franchise employees, and other individuals performing work activities within the NSH.
Terminal Cleaning	The process for cleaning and disinfecting patient's room or bed space that is undertaken upon discharge of any patient or upon

discontinuation of Contact Precautions. The patient room, cubicle, or bed space, bed, bedside equipment, environmental surfaces, sinks and bathroom should be thoroughly cleaned and disinfected before another patient is allowed to occupy the space. The bed linens should be removed before cleaning begins. (PHAC, 2012). Unused patient supplies that cannot be cleaned and disinfected should be discarded.

APPENDIX B – Bristol Stool Chart

Bristol Stool Chart

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 its 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

med.umich.edu/1libr/Gastro/BristolStoolChart.pdf

APPENDIX C - Environmental Cleaning and Disinfection for *Clostridioides difficile* (*C. difficile*) infection (CDI)

1. In rooms where *Clostridioides difficile* precautions are in place, environmental cleaning is performed using a hospital-approved sporicidal agent.
2. Particular attention is paid to the cleaning and disinfection of patient-specific items and high touch surfaces including bedside rails, telephone, call bells, light switches, door handles, faucets, toilets, etc.
3. Manufacturer instructions for mixing and using a sporicidal agent are followed considering the following general principles:
4. Work from clean to dirty surfaces.

NOTE: with some sporicidal agents this sequence may be different. Follow validated manufacturer's instructions for use.

5. Do not apply sporicidal solution onto the surface to be cleaned. Apply solution directly to cleaning cloth and ensure cloth contains proper amount of solution prior to cleaning surfaces.

NOTE: some sporicidal products require direct application to toilet bowls and sinks. Follow validated manufacturer's instructions for use).

6. Use friction when cleaning to assist in removing spores.
7. Change cleaning cloths and mop heads when moving from clean to dirty areas, when moving to another patient bed space or room, and whenever necessary (i.e., heavily soiled).
8. Disposable cleaning cloths are recommended.
9. Double dipping of cloths into the disinfectant solution is to be always avoided.
10. Terminal cleaning is to occur when a *C. difficile* infected patient is discharged from a room and upon resolution of symptoms.
11. Until proper terminal cleaning has taken place, Contact Precautions remain in effect.
12. Prior to initiating terminal cleaning, all privacy curtains must be taken down and sent for laundering.
13. Other items that can be washed such as shower curtains and window curtains must be sent for laundering.
14. All disposable items including paper towels and toilet paper must be discarded.
15. Toilet brushes must be single patient use.
16. Floor surfaces are not a significant source of transmission of *C. difficile* and do not require special cleaning.

VERSION HISTORY

Version:	Effective:	Approved by:	What's changed:
Original	2017-08-07	[Issuing Authority]	N/A
Standard Review	2022-10-14	Gail Blackmore, Senior Director, Quality, and Improvement	Minor revisions. Addition of Clinical Care Provider Definition