



PROVINCIAL STANDARDS & GUIDELINES



Clostridium difficile Guideline for Hemodialysis Outpatients

Updated March 2020

Developed by the BC Renal Hemodialysis Committee



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IMPORTANT INFORMATION

This BC Renal guideline/resource was developed to support equitable, best practice care for patients with chronic kidney disease living in BC. The guideline/resource promotes standardized practices and is intended to assist renal programs in providing care that is reflected in quality patient outcome measurements. Based on the best information available at the time of publication, this guideline/resource relies on evidence and avoids opinion-based statements where possible; refer to www.bcrenalagency.ca for the most recent version.

For information about the use and referencing of BC Renal guidelines/resources, refer to <http://bit.ly/28SFr4n>.



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1.0 Scope of Guideline

Applicability: In centre and community hemodialysis (HD) units in BC.

This guideline provides recommendations on the screening, assessment and follow-up of patients in outpatient hemodialysis units for clostridium difficile (C diff).

2.0 Recommendations

Recommendation #1: Implement the recommendations on [Table 1](#) for the screening, assessment and follow-up of patients in hemodialysis outpatient units for C diff.

Table 1: Recommendations for the Screening, Assessment & Management of C diff

Topic	Specifics	Clostridium difficile (C diff)
Clinical testing (new & existing patients)	When to swab/test?	<p>Adults: Unexplained and new onset ≥ 3 unformed stools in 24 hours.</p> <ul style="list-style-type: none"> If C diff negative result, do not repeat test within 7 days during the same episode of diarrhea. If C diff positive result, do not repeat test during the same episode of diarrhea. If C. diff result is indeterminate, clinical re-assessment is required. If the diarrhea has resolved or there is an alternative cause for the diarrhea, no further testing is needed. If the diarrhea is ongoing without an alternative explanation, consider repeat C. diff testing or empiric treatment for C. diff infection. <p>Children: Unexplained and new onset ≥ 3 unformed stools in 24 hours.</p> <ul style="list-style-type: none"> Testing is not recommended in children ≤ 2 years old, except for patients with Hirschprung's disease or oncology patients. If C diff negative result, do not repeat test within 4 days during the same episode of diarrhea. If C diff positive result, do not repeat test within 14 days during the same episode of diarrhea.
	What to order?	C difficile.
	What to test?	Stool (unformed stool)

Topic	Specifics	While Awaiting Results of Swab (usually available within 24 hrs)	C diff Positive Patients
Prevention of disease transmission	Precautions & segregation	Assume C diff until proven otherwise.	<ul style="list-style-type: none"> Conduct risk assessment. Contact local Infection Control Practitioner (ICP) if questions/concerns. Implement contact plus¹ precautions. Implement toileting precautions: <ul style="list-style-type: none"> Dedicated commode (or toilet) and sink preferred. If not available, use disposable bedpan/urinal & macerator OR reusable bedpan/urinal & bedpan washer/disinfectant. Utilize routine practices when transporting & emptying bedpans/urinals/commodes. If none of the options above are available, contact the local ICP. Physically separate patient from other patients: <ul style="list-style-type: none"> Private room preferred. If not available, create a space > 2 meters away from other patients. If neither is option available, contact the local ICP. <p>If the conditions above cannot be met, contact the local ICP to jointly identify plan to manage patient in the unit &/or transfer to a more appropriate unit until C diff infection resolved.</p> <p>Continue precautions until symptoms (diarrhea) have resolved.</p>

¹ Refer to: www.picnet.ca/wp-content/uploads/PrecautionSigns_PICNet.pdf. Wear personal protective equipment on each contact with the patient or their environment.

Topic	Specifics	While Awaiting Results of Swab (usually available within 24 hrs)	C diff Positive Patients
Prevention of disease transmission	Surface disinfection of dialysis station & equipment post dialysis	Assume C diff until proven otherwise.	<p>Usual procedure² with an additional step of wiping all reusable supplies, equipment (including HD machine) and surfaces in the dialysis station with a <i>sporicidal disinfectant</i> (after the initial cleaning).</p> <ul style="list-style-type: none"> In-centre units: Disinfection of the HD machine/supplies is usually done by dialysis-trained staff. Preparation for cleaning/disinfection of the HD station is also done by dialysis-trained staff but the actual cleaning/disinfection of the HD station (including cleaning/disinfecting with a sporicidal disinfectant) is usually done by housekeeping staff. Community-dialysis units: All cleaning/disinfection between patients is usually done by dialysis-trained staff. <p>Leave the commode (without the pan) in the immediate patient area until cleaned and disinfected with a <i>sporicidal disinfectant</i>.</p> <p>Refer to Table 2 for cleaning HD machines where the manufacturer does not approve the use of sporicidal disinfectants.</p>
	Housekeeping /cleaning	Assume C diff until proven otherwise.	<p>Additional Precaution Discharge Clean with Sporicidal.</p> <ul style="list-style-type: none"> Refer to PICNet guideline “BC Best Practices for Environmental Cleaning for Prevention and Control of Infections in All Healthcare Settings and Programs at www.picnet.ca/wp-content/uploads/British-Columbia-Best-Practices-for-Environmental-Cleaning-for-Prevention-and-Control-of-Infections-in-All-Healthcare-Settings-and-Programs.pdf (page 33, Additional Precaution Discharge Clean with Sporicidal). HD space & bathroom/commode is thoroughly cleaned <u>after each patient</u>. A sporicidal disinfectant is used in addition to a cleaner.
<p>Additional notes:</p> <ol style="list-style-type: none"> Continue precautions for at least 72 hrs after diarrhea has resolved - there is no need to retest if symptoms have resolved. If symptoms continue despite treatment, consult with local experts (ICP, GI, etc) re next steps and continued need for additional precautions, etc. If a patient with diarrhea is transferred to another HD unit, please communicate the C diff status and testing performed to the receiving unit. 			

² Refer to BCR guideline Prevention of Disease Transmission in HD Units www.bcrenalagency.ca/resource-gallery/Documents/Prevention%20of%20Disease%20Transmission%20in%20HD%20Units.pdf (pages 3 and 4).

Table 2: Recommendations for the Screening, Assessment & Management of C diff

Preamble

Sporicidal agents are normally required for disinfecting C diff. However, sporicidal agents are not approved for use by some manufacturers on HD machines. Regular facility-approved disinfectants do not kill C diff spores. Thus, spores must be caught in a disposable cloth and the cloth thrown away in a patient-specific biohazard garbage bag.

Procedure

1. Once dialysis is complete and the patient has left the area, put on disposable PPE (gown, mask with visor and clean gloves).
2. Squeeze out facility-approved disinfectant wipes and bring to bedside.
3. Strip the HD machine and put all supplies in designated lidded biohazard garbage.
4. Place Biohazard bag and acid jug in lidded biohazard garbage (DO NOT RECYCLE).
5. Wipe the HD machine as usual with facility-approved disinfectant wipes but with more scrubbing to remove spores (refer to www.bcrenalagency.ca ► [Health Professionals](#) ► [Clinical Resources](#) ► [Hemodialysis Prevention of Disease Transmission in HD Units](#) for usual procedure).
6. Dispose of PPEs in lidded biohazard garbage.
7. Perform hand hygiene. Where possible, use soap and water.
8. Clean the patient area per sporicidal precautions procedures (housekeeping).
9. Once the patient area has been cleaned, put on disposable PPE.
10. Vigorously scrub the HD machine again with facility-approved disinfectant.
11. Dispose of PPEs in lidded biohazard garbage.
12. Perform hand hygiene. Where possible, use soap and water.

3.0 References

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4.0 Sponsors

Developed by:

- A working group of multidisciplinary renal care providers and infection control practitioners/ medical microbiologists from across BC

Approved by:

- BCR Hemodialysis Committee (November 2019)
- BCR Medical Advisory Committee (November 2019)

For information about the use and referencing of BCR provincial guidelines/resources, refer to www.bcrenalagency.ca.