

Date: August 27, 2015
To: Central Zone Physicians
From: Dr. Deena Hinshaw, on behalf of Medical Officers of Health, Central Zone

Colleagues:

Clostridium difficile infection (CDI) has been increasing in incidence and severity in Canada, the US, and Europe since the early 2000's.¹ CDI is the most common cause of infectious health care-associated diarrhea in these countries², and 7 - 8% of patients with health care-associated CDI in Canada experience serious complications such as intestinal hemorrhage, sepsis and death.^{2,3} In 2002, the average cost to Canadian hospitals of *C. diff* readmissions was estimated at \$12,820 per patient³, which is likely to have risen in the past 13 years.

Given the impact of CDI on patient outcomes, the availability of evidence-based guidelines for CDI⁴, and the evidence that a standardized approach to CDI treatment reduces mortality and infection recurrence⁵, the Central Zone Antimicrobial Stewardship Working Group is supporting the roll-out of a standardized CDI Toolkit across the zone. This began earlier this year in several sites, and roll-out will be complete this fall.

Please have a look at the attached information sheet on the CDI Toolkit and consider using this resource for patients with suspect or confirmed CDI. Questions about this resource can be directed to your local IPC Professional or pharmacist. Please also continue as always to be mindful of antibiotic choices, as antimicrobial stewardship and consistent infection control practices are key in the prevention of CDI.

Thank you for your ongoing commitment to excellent patient care.

Sincerely,

Dr. Deena Hinshaw
Medical Officer of Health
Alberta Health Services, Central Zone

¹ Lessa FC, Gould CV and McDonald LC. 2012. Current Status of Clostridium difficile Infection Epidemiology. *Clin Infect Dis*. 55(Suppl 2):S65-S70. doi: 10.1093/cid/cis319

² Gravel D et al. 2009. Health Care-Associated *Clostridium difficile* Infection in Adults Admitted to Acute Care Hospitals in Canada: A Canadian Nosocomial Infection Surveillance Program Study. *Clin Infect Dis*. 48(5): 568-576. doi: 10.1086/596703

³ Miller M et al. 2002. Morbidity, Mortality, and Healthcare Burden of Nosocomial *Clostridium difficile*-associated diarrhea in Canadian Hospitals. *Infection Control and Hospital Epidemiology*. 23(3): 137-140. doi: 10.1086/502023

⁴ Surawicz CM, Brandt LJ, Binion DG, et al. Guidelines for Diagnosis, Treatment, and Prevention of Clostridium difficile Infections. *Am J Gastroenterol*. 2013;108(4):478-498. <http://dx.doi.org/10.1038/ajg.2013.4>.

⁵ Brown AT, Seifert CF. Effect of Treatment Variation on Outcomes in Patients with Clostridium difficile. *Am J Med*. 2014;127(9):865-870. doi:10.1016/j.amjmed.2014.05.016

Introducing the Central Zone *C.difficile* Infection Toolkit

Central Zone Antimicrobial Stewardship Working Group is endorsing the use of a set of tools to assist providers in managing care of those with *Clostridium difficile* infection (CDI). The CDI Toolkit includes pre-printed care orders (PPCO), a patient management flow map, Contact Sporicidal Precautions sign and a checklist for nursing staff.

WHY WAS THIS DONE?

There are established, evidence based guidelines for CDI.¹ A standardized approach to the diagnosis and treatment of CDI reduces mortality and infection recurrence.²

- Knowledge and practice gaps have been reported in Central Zone, including (but not limited to):
 - Empiric antibiotic therapy choice for CDI, and following a step wise approach for treating reinfections
 - Formed stools being sent for *C. diff.* testing
 - Tests for cure routinely ordered
 - Use of anti-diarrheal medications with known or suspected CDI
- The information in the PPCO and supporting tools address the knowledge and practice gaps, and incorporate current evidence and best practices. They are customized for use in Central Zone.

HOW TO USE THE TOOLKIT:

- For any patient with suspect or confirmed CDI, the PPCO should be implemented.
- The PPCO will be available through each unit's regular processes for obtaining and storing forms.
- The Flowmap and checklist are references to guide patient management. Poster size and laminated copies are available from your IPC professional.
- Contact Sporicidal Precautions signs for when CDI cases are identified.
- CDI tools are available on all acute care units in Central Zone and on Central Zone IPC webpage at : <http://insite.albertahealthservices.ca/7887.asp>

WHEN:

- Roll out scheduled for fall 2015.

FOR MORE INFORMATION:

- IPC professional: <http://insite.albertahealthservices.ca/ipc/tms-ipc-cz-bpg-contact-list-and-site-assgnmnt.pdf>
- Contact your local Pharmacist
- Central Zone Drug Stewardship Pharmacist: Darren.pasay@albertahealthservices.ca, 587-280-2307

1. Surawicz CM, Brandt LJ, Binion DG, et al. Guidelines for Diagnosis, Treatment, and Prevention of Clostridium difficile Infections. *Am J Gastroenterol.* 2013;108(4):478-498. <http://dx.doi.org/10.1038/ajg.2013.4>.
2. Brown AT, Seifert CF. Effect of Treatment Variation on Outcomes in Patients with Clostridium difficile. *Am J Med.* 2014;127(9):865-870. doi:10.1016/j.amjmed.2014.05.016.