**Provincial Infectious Disease Advisory Committee (PIDAC)**
**Best Practices Document for the Management of**
***Clostridium difficile* in all health care settings**
**Summary of June 2007 document revisions**

This is a brief summary of the most recent revisions to the PIDAC Best Practices Document for the Management of *Clostridium difficile* in all health care settings. Infection Control Practitioners must refer to the actual document for further details and references accessed from the PIDAC website http://www.health.gov.on.ca/english/providers/program/infectious/diseases/ic_cdiff.html

**Background:**

- Since 2000 there has been an increase in the rates of *C. difficile* in some health care settings. In some of these settings this has been associated with the appearance of an epidemic strain of *C. difficile*. Some characteristics of this strain include the presence of a binary toxin, increased resistance to clindamycin and fluoroquinolones and potential for increased adverse events.
- This strain has been associated with outbreaks in Europe, the United States and Canada.
- This increase in C. difficile associated disease (CDAD) has resulted in significant additional costs to the heath care system.

| Reference | June 2007 CDAD revisions |
|---|---|
| **Infection Prevention and Control Sub-Committee members** | New committee member: Dr. Michael Gardam<br>Ex-officio committee member: Liz Van Horne |
| **Table of Contents** | No content change |
| **Preamble** | No content change |
| **Glossary of Terms** | Hospital grade disinfectant: A disinfectant that has a drug identification number (DIN) from Health Canada indicating approval for use in Canadian hospitals |
| **Background** | No content change |
| **Risk Factors for *C. difficile*** | No content change |
| **Testing for *C. difficile* Cytotoxin** | No content change |
| **Surveillance** | The case definition of *Clostridium difficile* associated **disease** (CDAD) is:<br>a) Laboratory confirmation of a positive toxin assay for *C. difficile* together with diarrhea<br>OR<br>b) Visualization of pseudomembranes on sigmoidoscopy or colonoscopy, or histological/pathological diagnosis of pseudomembranous colitis<br>Diarrhea is defined as:<br>• Three or more loose/watery bowel movements in a 24 hour period; and<br>• The bowel movements are unusual or different for the patient, and; there is no other recognized etiology fort he diarrhea (for example, laxative use, inflammatory bowel disease)<br>*loose/watery: if the stool were to be poured into a container, it would conform to the shape of the container. |

| | |
|---|---|
| | The following definitions should be used to determine whether the case is nosocomial.<br>• Nosocomial:<br>The infection was not present on admission (i.e. onset of symptoms > 72 hours after admission) or the infection is present at the time of admission but is related to a previous admission to the same facility within the last 4 weeks.<br>• Non-nosocomial:<br>The infection was present on admission of < 72 hours after admission and there was no admission to the same facility within the last 4 weeks. |
| **IPAC for CDAD** | No content change |
| **Accommodation** | No content change |
| **Contact Precautions** | No content change |
| **Hand Hygiene** | a) Soap and water is theoretically more effective in removing spores than alcohol-based hand rub.<br>b) When hand washing sink is immediately available then hands should be washed with soap and water after glove removal.<br>c) When hand washing sink is not immediately available then hands should be cleaned using an alcohol-based hand rub, after glove removal.<br>d) Hand hygiene should **not** be carried out at a patient sink as this will re-contaminate the healthcare worker's<br>e) Education should be provided to the patient on the need and procedure to be used for hand hygiene. Patients who are unable to perform hand hygiene independently should be assisted by the healthcare provider |
| **Environmental Cleaning** | c) Cleaning must be thorough, taking into account the following principles:<br>ii) The physical act of friction is necessary to remove *C. difficile* spores.<br>f) In patient-care areas where there is evidence of ongoing transmission of *C. difficile*, use of hypochlorite-based products for disinfection after the room is cleaned with hospital-grade disinfectant may be considered, in consultation with Infection Prevention and Control and Occupational Health and Safety (CDC, 2004). Alternatively, the organization may consider the use of new disinfectant products with in vitro evidence of sporicidal activity. Compatibility of products and occupational exposures must be considered. |
| **Visitors** | No content change |
| **Patient Transfer** | No content change |
| **Patient Discharge** | No content change |
| **Discontinuation of Precautions for *C. difficile*** | No content change |
| **Treatment of *C. difficile*** | No content change |
| **Recurrence of Symptoms** | • Relapse refers to the return of the symptoms of CDAD after a symptom-free period. With CDAD, cases should be counted as a relapse if symptoms recur within 2 months of the last infection.<br>• Recurrence of CDAD is common and occurs in about 30% of cases. If diarrhea recurs, the patient should be immediately placed on Contact Precautions, retested for C. difficile cytotoxin and re-initiation of therapy considered as outlined above.<br>• If a patient has recurrent CDAD, consideration may be given to leaving the |

| | |
|---|---|
| | patient in single room accommodation even after resolution of symptoms. |
| **Staff Education** | No content change |
| **Outbreaks of *C. difficile*** | • Definition:<br>Cases of CDAD occurring at a rate exceeding the normally expected baseline rate for the facility (or unit, floor, ward) during a specified period of time should be considered as an outbreak.<br>The definition of an outbreak for CDAD will depend on the endemic (or baseline) rate for the facility/home.<br>An outbreak should be declared when there is evidence of transmission of CDAD from patient to patient or when the endemic rate of CDAD for that area is exceeded.<br><br>• Outbreak management:<br>In patient-care areas where there is evidence of ongoing transmission of *C. difficile*, use of hypochlorite-based products for disinfection after the room is cleaned with hospital-grade disinfectant may be considered, in consultation with Infection Prevention and Control and Occupational Health and Safety (CDC, 2004). Alternatively, the organization may consider the use of new disinfectant products with in vitro evidence of sporicidal activity. Compatibility of products and occupational exposures must be considered. |
| **Appendix A: Patient Transportation** | No content change |
| **Appendix B: Sample Cleaning Protocol for Patient/Resident Rooms Contaminated with *Clostridium difficile*** | Daily Cleaning:<br>• Bathrooms<br>• Horizontal surfaces<br>• Walls<br>• Floors<br>Cleaning at discharge/transfer:<br>• Discard glove box, bar soap if present, toilet paper, toilet brush, sharps container and replace with new items. |
| **Appendix C: Sample Checklist for Discharge/Transfer Cleaning** | Check list for discharge cleaning of all rooms<br>• Item # 9: Soap/alcohol-based hand rub dispensers<br>Additions when cleaning a room for a patient on additional precautions:<br>• Item #3 Are the following discarded?<br>o Patients bar soap<br>o Toilet paper |
| **Patient information sheet** | No content change |
| **References** | No content change |