



## INFORMATION SHEET: CLOSTRIDIUM DIFFICILE (V1 – DECEMBER 2011)



### What is Clostridium difficile?

*Clostridium difficile* (*C. difficile*) is a spore forming bacterium that is found in stool specimens of many healthy children under the age of one year, and some adults. After antimicrobial treatment, toxin-producing strains of *C. difficile* multiply and become a common cause of antibiotic-associated diarrhoea. Risk factors include: Older patients (> 60 years); significant underlying disease; stomach acid reduction medications; prolonged hospital stay; Intensive Care stay; prolonged antibiotic course; administration of multiple antibiotics.

### Transmission – Faecal-Oral Route

*C. difficile* is spread via faeces, and widespread contamination of the patient's environment with *C. difficile* bacteria and spores can occur. These can then be transferred to other patients via contaminated equipment, or hands of healthcare workers (HCWs).

### Clinical Symptoms & Incubation Period

- Watery green diarrhoea; fever; loss of appetite; nausea; abdominal pain/tenderness.
- Incubation Period not precisely known, but usually < 7 days.

### Specimens and Diagnosis

- A stool sample should be collected from symptomatic patients for *C. difficile* testing as soon as practicable.
- Patients without diarrhoea, or who have had a previous positive test within the preceding 8 weeks should NOT be tested.
- Review of radiological appearances or colonic appearance/biopsy findings from an Endoscopic procedure may be diagnostic.

### Antibiotic Prescribing

- Prescribing should comply with Therapeutic Guidelines - Antibiotic Version 14, 2010 & be consistent with antimicrobial susceptibility results.
- Minimum durations of treatment and minimum number of agents required should be used.

### Patient Management: Transmission Based Contact Precautions

- Patients should be isolated in a single room with Ensuite. If not available, they should use a dedicated commode/bed pan.
- Where possible, equipment should be dedicated to that patient (or single use), eg stethoscope, thermometer, saturation machine, etc.
- Long sleeved, disposable, impermeable gowns and gloves should be worn for all contact with the patient and their environment.
- Gown and gloves should be fitted prior to entry to the room.
- Gown and gloves should be removed prior to leaving the room, and disposed of into waste bin inside room.
- Contact Precautions should be maintained until > 48 hours after symptoms have ceased.
- Unnecessary transfers of symptomatic patients within the hospital should be avoided.
- Procedures/Therapy sessions/Investigations that can be postponed should be, until 48 hours after the patient's symptoms have ceased.
- If transfer/procedure is unavoidable, the receiving department/facility should be notified of the patient's status **prior** to transfer.
- Patients must be instructed to perform HH before leaving their room, if necessary.
- **Hand Hygiene – Special Note on Spores**
  - Hand hygiene should be performed in accordance with the 5 Moments of Hand Hygiene.
  - Although Alcohol Based Hand Rubs (ABHR) are known to be inactive against spores of *C. difficile*, NHMRC guidelines still recommend their use in accordance with the 5 Moments. However if hands become visibly soiled, handwashing with soap and water is required.

### Environmental Hygiene

- Follow specific advice from Infection Control.
- Disinfect ALL high touch surfaces in the bedroom and bathroom with a chlorine-based disinfectant (eg. 1 in 1000ppm Sodium Hypochlorite solution in cold water) **after cleaning** with a neutral detergent, or use a combination detergent/disinfectant solution, (ie. TGA approved).
- ALL reusable equipment must be cleaned and disinfected between patient uses, (ie. Cleaning of any re-useable item between patient uses is to be followed with disinfection with a Sodium Hypochlorite 1000ppm Solution or TGA approved disinfectant wipes.)

### References

1. HICMR Policy: Transmissible Diseases. <http://www.hicmr.com.au/>
2. NHMRC, 2010. Australian Guidelines for the Prevention and Control of Infection in Healthcare. <http://www.nhmrc.gov.au/node/30290>
3. NSW Health, 2007. PD2007\_036: Infection Control Policy. [http://www.health.nsw.gov.au/policies/pd/2007/PD2007\\_036.html](http://www.health.nsw.gov.au/policies/pd/2007/PD2007_036.html)
4. AICA/ASID, July 2010. Draft Position Statement: Infection Control Guidelines for Patients with *Clostridium Difficile* Infection in Healthcare Settings. <http://www.publish.csiro.au/paper/HI11011.htm>