

Infection Control Management of Clostridioides difficile infection (CDI)

A guide for healthcare workers

What is Clostridioides difficile?

Clostridioides difficile (C. diff) is a Grampositive, anaerobic bacterium commonly found in the gastrointestinal tract. C. diff produces spores that are shed in faeces which can survive in the environment for a long time. C. diff infection (CDI) may result in mild diarrhoea or extend to a fulminant colitis potentially resulting in intestinal perforation and death.

CDI is a common cause of hospital acquired infectious diarrhoea due to the disruption of the patient's bowel flora by antibiotic therapy in combination with the transfer of spores between healthcare workers and contaminated objects.

Risk factors for CDI

Risk factors for hospital acquired CDI include:

- antibiotic exposure
- gastrointestinal surgery
- gastric acid suppression therapy (e.g. proton pump inhibitor use)
- older age
- extended health care stays or health care facility residence
- immune suppression or chemotherapy use.

Strategies to reduce the risk of CDI acquisition by patients and residents

Strategies to reduce the risk of CDI developing and transmitting in the healthcare environment include:

- Antimicrobial stewardship
- Environmental cleaning and disinfection
- Contact precautions for confirmed cases of CDI

Antimicrobial stewardship

 Prescribe antimicrobials in accordance with the principles of antimicrobial stewardship and as outlined within the Antimicrobial Stewardship Clinical Care Standard.

Environmental cleaning and disinfection

- Undertake environmental cleaning and disinfection in accordance with the Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019).
- For confirmed cases of CDI, use a detergent followed by a sodium hypochlorite solution of 1000ppm or a one-step combined detergent/sporicidal product for daily environmental cleaning of patient/resident rooms and when the



patient/resident is transferred or discharged.

Contact Precautions for patients diagnosed with CDI

- Confirmed case of Clostridioides difficile should be managed under contact precautions in addition to standard precautions (See Standard Precautions: A guide for healthcare workers for further information).
- Patients with suspected or confirmed CDI with diarrhoea (3 or more loose stools within a 24-hour period) should be placed in a single patient room with an ensuite if available.
- Staff should perform hand hygiene as per the 5 moments for hand hygiene (See Hand Hygiene in residential and aged care fact sheet for further information).
 Wash hands with antimicrobial soap and water if hands become soiled or gloves are not used.
- Staff should also wear appropriate PPE including gown/apron and gloves prior to entering the patient/resident room or when anticipating contact with the patient/resident or their surroundings.
- After leaving the room, remove gloves, perform hand hygiene, remove gown/apron and perform hand hygiene again.
- Use dedicated single use patient equipment where possible. If equipment is to be used by other patients, clean and disinfect any non-disposable equipment and items when removed from patient rooms.
- In most circumstances, contact precautions can be removed 48hours after diarrhoea has resolved without the need for retesting for CDI. If diarrhoea reoccurs, contact precautions should be reinstated until the diagnosis had been confirmed or exclude by the medical practitioner.

 If available, consult with the infection prevention and control service.

Education for patients and visitors

In the hospital or long-term residential healthcare setting, healthcare workers should ensure patients and visitors are informed about CDI and the use of standard and contact precautions, with a particular focus on effective hand hygiene.

Further resources

- <u>National Hand Hygiene Initiative –</u>
 <u>NHHI | Australian Commission on Safety and Quality in Health Care</u>
- Australian Guidelines for the Prevention and Control of Infection in Healthcare | Australian Commission on Safety and Quality in Health Care
- Antimicrobial stewardship | Australian Commission on Safety and Quality in Health Care

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Version 4, February 2024