

### ***Clostridium difficile* Diarrhea**

**POLICY:**

It shall be the policy of \_\_\_\_\_ to utilize accepted infection control methods to prevent and control *Clostridium difficile* (*C. difficile*) diarrhea in all of the organization's facilities.

**RESPONSIBILITY:****PURPOSE:**

The primary goals of *C. difficile* prevention and control in long-term care facilities are:

1. Preventing the transmission of *C. difficile* to residents, staff, and visitors while preserving the quality of life for residents with *C. difficile* diarrhea.
2. Facilitating admission or re-admission of residents with *C. difficile* diarrhea.

**BACKGROUND:**

- *C. difficile* diarrhea has become a common infection in both hospitals and long-term care facilities
- Emergence of *C. difficile* diarrhea has been fostered by excessive use of antibiotic therapy as well as patients who are chronically colonized in the GI tract
- Residents with active *C. difficile* diarrhea as well as chronic carriers are the reservoir for transmission
- Environmental contamination with *C. difficile* occurs frequently and is an important source for transmission
- Mode of transmission is by fecal-oral transmission after either direct contact with contaminated environmental surfaces (bedrails, commode, floors) or a colonized person

**PROCEDURE:****Surveillance**

Monitoring for *C. difficile* diarrhea is an important aspect of the ongoing infection control program in long-term care facilities. Surveillance for *C. difficile* diarrhea will include:

1. Regular review of test results for *C. difficile* stool toxin obtained as part of routine care to identify residents with *C. difficile* diarrhea by the facility infection control practitioner
2. Nursing home-associated *C. difficile* diarrhea is defined diarrhea occurring in a long term care resident who has been a resident in the facility for at least 30 days and who has not had a diagnosis of *C. difficile* diarrhea in the prior 3 months.
3. Residents who have been admitted from a hospital and develop *C. difficile* diarrhea within 30 days of admission to the facility will be considered to have nursing home onset, hospital-associated diarrhea. These cases will be monitored separately from the nursing home-associated cases.
4. Infection control professional will monitor the monthly frequency of nursing home associated *C. difficile* diarrhea and calculate the endemic rate of this infection and utilize this information to define the threshold level of concern that would prompt additional investigation or enhanced control measures.

- a. Surveillance will include logging the number of stool toxin tests done and the number of positive toxin assays by each unit of the facility and for the entire facility
- b. Rates of C. difficile diarrhea will be calculated in 2 ways:
  - i. # assays positive per month divided by the total assays done per month multiplied by 100
  - ii. # assays positive per month divided by total resident care days per month multiplied by 1000 (# episodes per 1000 residents per month)

### **Control Measures**

The control measures below are based on the concept that the nursing home represents the residents' home.

#### **A. General Control Measures**

1. Standard Precautions applies to all residents
  - Standard Precautions (see Standard Precautions policy for details of the procedures) and hand antisepsis should be followed carefully and this will suffice for most residents with C. difficile diarrhea with some exceptions (see below when Contact Precautions will be necessary)
2. Hand hygiene
  - Strict adherence to hand hygiene protocols must be maintained
  - Alcohol-based hand antiseptic may be acceptable; however, washing with soap and water is preferred because it may be more effective in washing off spores that are not killed by alcohol
3. Communication
  - If a resident with C. difficile diarrhea requires transfer to another facility, this fact will be noted on the transfer documents.

#### **B. Specific Control Measures**

1. Admissions
  - It is the policy of not to deny admission to any individual who is known to have C. difficile diarrhea as long as the resident is undergoing therapy
2. Room Placement
  - Isolation room or private room is not required but is preferred if available
  - Symptomatic residents with C. difficile diarrhea can be cohorted in the same room if necessary
  - Private bathroom or individual commode may be useful, especially if resident hygiene is inadequate
3. Activities

- Resident with *C. difficile* diarrhea should be allowed to ambulate, socialize as usual, and participate in therapeutic and group activities as long as contaminated body substances can be contained
  - Hand hygiene is a very important component of participation in group activities. Residents with *C. difficile* diarrhea will have their hands cleaned with antimicrobial soap prior to leaving their room and whenever they again become contaminated when the resident is out of their room.
  - Residents with *C. difficile* diarrhea who are cognitively or behaviorally impaired and cannot maintain hygienic practices present challenges. Staff will work with the infection control professional and others to devise individual strategies to address infection control issues in order to allow the resident the opportunity for movement and socialization.
4. Environmental Cleaning. Environmental contamination with *C. difficile* is well documented. Therefore, careful environmental cleaning with a standard disinfectant should be done at least weekly, or when visibly soiled with stool, and for terminal cleaning after diarrhea has resolved
- Room cleaning - Standard facility procedures will be followed for cleaning the rooms of residents with *C. difficile* diarrhea. Use of the facility's standard disinfectant is adequate for this purpose. Attention should be given to bedside tables, handrails, call buttons, window sills, and toilets. Once a resident has no more diarrhea their room should undergo terminal cleaning as if a new resident was to occupy the room.
  - Physical and recreational therapy equipment - The hands of residents with *C. difficile* diarrhea will be cleaned before the resident uses recreational or physical therapy equipment. Standard facility procedures will be followed for routine cleaning and disinfection of recreational and physical therapy equipment used by residents with *C. difficile* diarrhea.
  - Trash disposal - Standard facility procedures for trash disposal will be followed; no special handling is necessary
5. Shared Bathrooms, Showers, Tubs, etc.
- Bathrooms - In situations where a resident with *C. difficile* diarrhea shares a bathroom with a roommate who does not have *C. difficile* diarrhea, the bathroom will be cleaned and disinfected using standard facility procedure (e.g., daily and when visibly soiled).
  - Commodes- if used, it should not be shared with roommates
  - Showers, Tubs - Shared tubs and showers will be cleaned and disinfected per standard facility procedure after use by residents with *C. difficile* diarrhea. It may be practical to bathe residents with *C. difficile* diarrhea after other residents have completed their bathing.
6. Dishes, glasses, eating utensils, etc.-- No special precautions are needed.
7. Laundry
- Standard precautions will be used for the handling of laundry from residents with *C. difficile* diarrhea. Standard procedures will be used to deal with soiled laundry including bed linens.

- Special handling (i.e., double bagging, etc.) is not necessary. Laundry should not be rinsed at point of use.
  - No special laundering procedure is required.
8. Staff Education
- The facility has mandatory continuing education programs for staff that have direct contact with residents or items in their environment regarding standard infection control techniques as well as additional techniques such as contact precautions.
  - In addition, these programs emphasize that healthy people are at very little risk of developing *C. difficile* diarrhea and that there are no special precautions for pregnant staff who work with residents with *C. difficile* diarrhea.
9. Resident, Family, Visitor Education
- Residents and their families and visitors will be educated about *C. difficile* diarrhea and the precautions to be taken, including hand antisepsis and methods to limit environmental contamination with stool, urine, and respiratory secretions. This education will be done using short handouts describing *C. difficile* diarrhea and how it is transmitted and methods to control it.
  - Family and visitors will be required to clean their hands before entering and leaving the room of a resident with *C. difficile* diarrhea.
  - Family/visitors will wear gloves when handling the secretions/excretions of residents with *C. difficile* diarrhea or when providing direct care (e.g., bathing). Hands will be washed after glove removal.
  - Staff will provide families, visitors and other residents additional support to alleviate their concerns and to ensure that they understand that residents with *C. difficile* diarrhea need not be avoided.

C. Indications for Contact Precautions (in addition to Standard Precautions)

1. Although Standard Precautions and hand antisepsis are sufficient for most residents with *C. difficile* diarrhea, Contact Precautions may be indicated for residents with *C. difficile* diarrhea who are potentially more likely to shed the organism into their environment. Residents on Contact Precautions will not be placed in a private room except in extenuating circumstances (to be determined by the infection control professional in conjunction with nursing staff). The components of Contact Precautions that are important in long-term care are glove use and hand antisepsis. (see section on Contact Precaution for procedure details)
2. Contact Precautions, in addition to Standard Precautions, will be used in the following situations:
  - Residents who are incontinent of stool and it cannot be contained with an incontinence product
  - Residents who have impaired personal hygiene
  - Contact precautions will be maintained until the diarrhea has resolved

**REFERENCES**

1. Johnson S, Gerding DN. *C. difficile*-associated diarrhea. Clin Infect Dis 1998;26:1027-1036.
2. Simor AE, et al. *Clostridium difficile* in long-term care facilities for the elderly. Infect Control Hosp Epidemiol 2002;23:696-703.
3. McDonald LC, Coignard B, Dubberke E, et al. Recommendations for surveillance of *Clostridium difficile*-associated disease. Infect Control Hosp Epidemiol 2007;28:140-145.
4. Mylotte JM. Surveillance for *Clostridium difficile*-associated diarrhea in long-term care facilities: What you get is not what you see. Infect Control Hosp Epidemiol 2008;29:760-763.