



## *Clostridioides difficile* (Formerly Known as *Clostridium difficile*; Also Called “C diff”)

### What is *Clostridioides difficile*?

- Spore- and toxin-forming bacteria that cause diarrhea
- Often associated with recent antibiotic use

### What are the signs or symptoms?

- Usually the illness is mild and causes
  - Non-bloody diarrhea
  - Mild abdominal pain
  - Low-grade fever
- Rarely, more severe illness occurs, especially in immunocompromised children, and causes
  - High fever
  - Abdominal cramps
  - Very ill appearance
  - Very bloated abdomen
  - Occasional blood in the stool
- In children younger than 5 years (especially infants), *Clostridioides difficile* bacteria or protein toxin may be detected in the stool, yet the child has no symptoms. It is unclear why so many children harbor the bacteria but do not become ill.

### What are the incubation and contagious periods?

- Incubation period: Unknown. Illness can occur 5 days to 10 weeks after antibiotic therapy.
- Contagious period: Unknown because infants can harbor the bacteria and not cause illness in themselves or others.

### How is it spread?

- Fecal-oral route: Contact with feces of children who are infected. This generally involves an infected child contaminating their own fingers and then touching an object that another child touches. The child who touched the contaminated surface then puts their fingers into their own mouth or another person’s mouth.
- *C difficile* spores are also present in soil and the environment.

### How do you control it?

- Use good hand-hygiene technique at all the times listed in Chapter 2, especially after toilet use or handling soiled diapers and before anything to do with food preparation or eating. Alcohol-based sanitizers are not effective in killing *C difficile* spores. Soap and water will wash away the spores.

- Ensure proper surface disinfection that includes cleaning and rinsing of surfaces that may have become contaminated with stool (feces) with detergent and water and application of a US Environmental Protection Agency–registered disinfectant according to the instructions on the product label.
- Exclude infected staff members who handle food.
- Exclusion for specific types of symptoms (see the section Exclude from educational setting?).

### What are the roles of the educator and the family?

- A child or staff member with *C difficile* may have bloody diarrhea, which should trigger a medical evaluation.
- There are multiple causes of bloody diarrhea. The following recommendations apply for a child or staff member with diarrhea from any cause (see Diarrhea Quick Reference Sheet):
  - Report the condition to the staff member designated by the early childhood education program or school for decision-making and action related to care of ill children or staff members. That person, in turn, alerts possibly exposed family and staff members to watch for symptoms and notifies the Child Care Health Consultant.
  - Ensure staff members follow the control measures listed in the section How do you control it?
  - Report outbreaks of diarrhea (more than 2 children and/or staff members in the group) to the Child Care Health Consultant, who may report to the local health department.
- If you know a child or staff member in the program has *C difficile*
  - Follow the advice of the child’s or staff member’s health professional.
  - Report the infection to the local health department, as the health professional who makes the diagnosis may not report that the infected child is a participant in an early childhood education program or school, and this could lead to delay in controlling the spread of the disease.
  - Reeducate staff members to ensure strict and frequent handwashing, diapering, toileting, food handling, and cleaning and disinfection procedures.
  - In an outbreak, follow the direction of the local health department.

**Note:** *C difficile* spores will not be killed by alcohol-based hand sanitizers. Soap and water is more effective. Using gloves is also an effective means of preventing spread, although they are not required.

## Exclude from educational setting?

### Yes, if

- The local health department determines exclusion is needed to control an outbreak.
- Stool is not contained in the diaper for diapered children.
- Diarrhea is causing “accidents” for toilet-trained children.
- Stool frequency exceeds 2 stools above normal for that child during the time the child is in the program because this may cause too much work for educators and make it difficult for them to maintain sanitary conditions.
- There is blood or mucus in stool.
- The ill child’s stool is all black.
- The child has a dry mouth, no tears, or no urine output in 8 hours (suggesting the child’s diarrhea may be causing dehydration).
- The child is unable to participate and staff members determine they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group.
- The child meets other exclusion criteria (see Conditions Requiring Temporary Exclusion in Chapter 4).

## Readmit to educational setting?

### Yes, when all the following criteria are met:

- Once diapered children have their stool contained by the diaper (even if the stools remain loose) and when toilet-trained children do not have toileting accidents
- Once stool frequency is no more than 2 stools above normal for that child during the time the child is in the program, even if the stools remain loose
- When the child is able to participate and staff members determine they can care for the child without compromising their ability to care for the health and safety of the other children in the group

**Note:** It is not necessary to demonstrate negative *C difficile* stool test results to be readmitted to the educational setting. *C difficile* is caused by antibiotic use; however, it is treated with a different antibiotic than the one that caused the infection.

