

Clostridium difficile (*C. difficile*)

What is *C. difficile*?

C. difficile, also known as *C. diff*, are bacteria that live in the bowel of up to 7% of people without causing illness. Your intestines also normally contain many good bacteria that help you digest food and stay healthy. When antibiotics are taken to treat an illness, these good bacteria may be killed. *C. diff* bacteria are not killed by common antibiotics and continue to grow, which may cause you to become sick.

C. diff produces toxins that can cause damage to the cells in the intestines. The most common symptom of *C. diff* infection is diarrhea. In fact, it is the most frequent cause of infectious diarrhea in hospitals and health care facilities. *C. diff* infections may lead to serious illness.

Who is most at risk?

For most healthy people, *C. diff* is not a health risk. Those at greater risk of infection include:

- People who are taking antibiotics
- People undergoing cancer chemotherapy
- People who have other illnesses
- The elderly

What are the symptoms?

In some cases *C. diff* infection may cause no symptoms. However, it may also cause symptoms such as:

- Watery diarrhea
- Fever
- Loss of appetite
- Nausea
- Abdominal pain and tenderness

In cases where a patient has severe diarrhea, it can lead to complications including dehydration and colitis (inflammation of the lower intestine or colon). In rare cases, the infection can cause death.

How is *C. diff* spread?

C. diff bacteria and their spores are found in feces. The spores can live outside your body for weeks or months. They may be found on items you touch such as bed linens, bed rails, bathroom fixtures and medical equipment.

You can become infected if you touch a surface contaminated with feces and then touch your mouth, or if you eat or drink something that is contaminated.

Healthcare workers, staff and visitors can spread the infection to you if their hands have come in contact with the *C. diff* bacteria, and they have not properly cleaned their hands before touching you, or touching items that you might eat or drink.

C. diff bacteria are not spread through the air. You cannot get *C. diff* from someone sneezing or coughing.

How can I prevent the spread of *C. diff*?

The best way to stop the spread of *C. diff* is to regularly wash your hands with soap and water, especially after using the toilet and before you eat. Use an alcohol-based hand rub (ABHR, also known as hand sanitizer) if soap and water are not available.

If you are admitted to a health care facility and develop symptoms, such as diarrhea, that are either confirmed or suspected to be from *C. diff* infection, you will be moved to a room by

yourself. You will also be put on contact precautions to try to prevent spreading the infection to others.

What is the best way to wash my hands?

To wash your hands properly, follow the steps below:

1. Remove rings or other jewelry on your hands and wrists
2. Wet your hands with warm water
3. Wash all parts of your hands with soap and water for at least 20 seconds, and rub your hands together to create lather. To help children wash their hands, sing the alphabet song
4. Rinse hands well under warm running water
5. Dry your hands with a clean cloth or paper towel
6. Use the towel to turn off the tap and open the door when you leave if you are in a public restroom

If washing hands frequently apply hand cream often to prevent skin breakdown.

For more information on hand washing, see [HealthLinkBC File #85 Hand washing: Help stop the spread of germs.](#)

What are contact precautions?

Contact precautions are actions taken by health care facilities to try to prevent the spread of *C. diff* bacteria to other patients.

Contact precautions include placing all patients with suspected and confirmed cases of *C. diff* infection into single rooms. If single rooms are not available, patients may share a room if they have the same infection. A "Contact Precautions" sign will be placed outside the door.

Before entering the room of a patient who has or is suspected of having *C. diff* infection, the

following contact precautions must be taken by health care providers, staff and visitors:

1. Wash your hands
2. Put an isolation gown on over your clothing. This will help to avoid contact with any contaminated surfaces or with the patient
3. Put on non-sterile gloves

When leaving a patient's room, the following actions must be taken:

1. Remove gloves immediately and throw them in the garbage
2. Wash your hands
3. Remove isolation gown without touching the outside of the gown and place it in the linen hamper provided
4. Wash your hands for a second time before exiting the room

Health care facilities will also frequently clean surfaces with sporicidal agents to reduce the number of bacteria.

What are the treatments?

The first step in treating a *C. diff* infection is to stop taking the antibiotic that led to the infection. However, you should not stop taking your antibiotics until you have been told to do so by your health care provider. Although antibiotics may cause *C. diff* infection, antibiotics can also be used to treat *C. diff*. Your health care provider will prescribe an antibiotic to treat your *C. diff* infection. If antibiotic treatment is unsuccessful, fecal microbiota transplant (stool from a healthy donor) is now becoming an available option. Discuss this treatment with your health care provider. In rare cases, surgery may be considered if all other treatments have not worked, or the symptoms are very severe.



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