

Clostridium difficile, often called *C. difficile* or *C. diff.*, is a bacteria spread by microscopic spores. The bacteria cause inflammation of the gut or colon — colitis. This can lead to moderate-to-severe diarrhea, and sometimes to sepsis, which can develop as the body tries to fight the infection. Sometimes called blood poisoning, sepsis is the body's often deadly response to infection or injury. Sepsis kills and disables millions, and requires early suspicion and rapid treatment for survival.

Most *C. difficile* infections occur in hospitals or healthcare facilities. These are called healthcare-acquired infections, or HAIs. However, physicians are finding that more and more, people are coming into contact with the bacteria in the community.

Not everyone who has the bacteria becomes ill, however, so it is possible to spread the infection unknowingly.

Direct contact: If someone has the bacteria on their hands and touches someone else, the spores can be transferred to the other person.

Indirect contact: The spores can stay alive for quite a while on surfaces, such as bedside tables, elevator buttons, doorknobs, telephones, and even clothing. People who have the bacteria on their hands touch these objects, which are then touched by other people. The bacteria are then picked up by others and may be left behind on other surfaces that they touch.

C. DIFF TRANSMISSION COMMON SYMPTOMS

The *Clostridium difficile* bacteria are found in stool, or fecal matter, and are spread from person to person through direct and indirect means. When people have the bacteria on their hands and they touch their mouth, they may get the bacteria in their system.

Watery diarrhea (at least three bowel movements per day for two or more days). Diarrhea caused by *C. difficile* has as particular odor.

Feve

Decrease or loss of appetite

Nausea

Abdominal pain, bloating, tenderness.

If the infection progresses and becomes more severe, there may also be:

Dehydration Weight loss

RISK FACTORS

People who are in hospitals or other healthcare settings are at highest risk of developing *C. difficile* infections. Other people at higher risk are those who:

Are over 65 years

Have serious illnesses, particularly those that weaken the immune system Are taking or who have recently taken antibiotics

Are taking medications to manage stomach acid, including those known as proton pump inhibitors

Have had previous *C. difficile* infections.

PREVENTING C. DIFF

The only way to prevent developing an infection with *C. difficile* is by avoiding exposure to the bacteria. The most effective method to do this is by frequent and proper hand washing with soap and water by everyone, patients, visitors, and anyone who works in the healthcare facilities. It has been found that the waterless hand cleansers do not adequately kill *C. difficile*.

If a patient in a healthcare facility does have *C. difficile* infection, the patient should be isolated from other patients who do not have the infection to avoid spread of the bacteria. Healthcare workers who enter such an isolation room would have to wear gloves and gowns, which are then removed in a specific manner to keep the spores from leaving the room. This will prevent the spread of the bacteria to other patients.

Another way to reduce the risk of developing *C. difficile* infection is by not overusing antibiotics, as the longer they are taken, the higher the risk. This means not asking for or taking antibiotics for viral infections (like colds and the flu) and not taking someone else's antibiotics.

TREATING C. DIFF

Generally, *C. difficile* infection is diagnosed through a stool sample. Specific antibiotics are needed to treat *C. difficile*. Metronidazole (Flagyl) is usually the first medication prescribed. If this has not been effective, the second medication tried is usually vancomycin (Vancocin). A more costly antibiotic, fidaxomicin (Dificid), has been found to be effective for treatment of *C. difficile* if neither metronidazole or vancomycin has worked. In severe cases, surgery may be needed to remove the affected part of the colon.

Testing has been done for a new procedure called fecal microbiota transplant (FMT), or a stool transplant. Physicians introduce a donor's stool into the affected person's colon. This can be done with a colonoscope or nasogastric tube, but testing has looked at capsules as a better delivery method.

The CDC reports that about 20% of people experience a recurrence of *C. difficile* infection, sometimes repeatedly. However, testing with FMT is showing a high success rate in eliminating the infection altogether.

What are the signs and symptoms of sepsis?

Sepsis is a toxic response to an infection, like *C. difficile*. There is no single sign or symptom of sepsis. It is, rather, a combination of symptoms. Symptoms can include ANY of the following:

- **S** Shivering, fever, or very cold
- **E** Extreme pain or general discomfort ("worst ever")
- P Pale or discolored skin
- **S** Sleepy, difficult to rouse, confused
- — "I feel like I might die"
- **S** Short of breath

What should I do if I think I have sepsis?

If you suspect sepsis, call 9-1-1 or go to a hospital and tell your medical professional, "I AM CONCERNED ABOUT SEPSIS."



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