

What is *C. diff*?

Clostridium difficile (*C. diff*) is a bacteria that causes inflammation of the colon, known as colitis.

How is *C. diff* spread?

The bacteria are found in the feces (stool). People can become infected if they touch items or surfaces that are contaminated with feces and then touch their mouth or mucous membranes. *C. diff* can live for long periods on surfaces. Healthcare workers can spread the bacteria to patients or contaminate surfaces through hand contact.

What are the signs and symptoms of *C. diff*?

Some people carry the bacteria without having symptoms. Serious complications can result that require hospitalization and on rare occasions cause death. Symptoms include:

- Watery diarrhea (at least three bowel movements per day for two or more days)
- Fever
- Loss of appetite
- Nausea
- Abdominal pain/tenderness

How long after infection do symptoms appear?

Signs and symptoms usually develop within five to 10 days after starting a course of antibiotics, but may occur as soon as the first day or up to two months later.

Who is most at risk?

The risk for disease increases in patients with: antibiotic exposure, gastrointestinal surgery/manipulation, long length of stay in healthcare settings, a serious underlying illness, conditions that cause a weakened immune system such as cancer, and advanced age.

What type of health problems are caused by *C. diff*?

- Dehydration. Severe diarrhea can lead to a significant loss of fluids and electrolytes. This makes it difficult for your body to function normally and can cause blood pressure to drop to dangerously low levels.
- Kidney failure. In some cases, dehydration can occur so quickly that kidney function rapidly deteriorates (kidney failure).
- Toxic megacolon. In this rare condition, your colon is unable to expel gas and stool, causing it to become greatly distended (megacolon). Left untreated, your colon may rupture, causing bacteria from the colon to enter your abdominal cavity. An enlarged or ruptured colon requires emergency surgery and may be fatal.
- A hole in your large intestine (bowel perforation). This is rare and results from extensive damage to the lining of your large intestine or after toxic megacolon. A perforated bowel can spill bacteria from the intestine into your abdominal cavity, leading to a life-threatening infection (peritonitis).

- Death. Even mild to moderate *C. diff* infections can quickly progress to a fatal disease if not treated promptly.

How is *C. diff* diagnosed?

Toxins produced by *C. diff* bacteria can usually be detected in a sample of your stool.

How is *C. diff* treated?

The first step in treating *C. diff* is to stop taking the antibiotic that triggered the infection, when possible. Depending on the severity of your infection, treatment may include:

- Antibiotics. Ironically, the standard treatment for *C. diff* is another antibiotic. These antibiotics keep *C. diff* from growing, which in turn treats diarrhea and other complications.
- Surgery. For people with severe pain, organ failure, toxic megacolon or inflammation of the lining of the abdominal wall, surgery to remove the diseased portion of the colon may be the only option.
- Transplanting stool from a healthy person to the colon of a patient with repeat *C. diff* infections has been shown to successfully treat *C. diff*. These “fecal transplants” appear to be the most effective method for helping patients with repeat *C. diff* infections. This procedure may not be widely available and its long term safety has not been established.

How can *C. diff* be prevented?

To help prevent the spread of *C. diff*, hospitals and other healthcare facilities follow strict infection-control guidelines. If you have a friend or family member in a hospital or nursing home, remind caregivers to follow the recommended precautions.

Preventive measures include:

- Hand-washing. Healthcare workers should practice good hand hygiene before and after treating each person in their care. In the event of a *C. diff* outbreak, using soap and warm water is a better choice for hand hygiene, because alcohol-based hand sanitizers do not effectively destroy *C. diff* spores. Visitors also should wash their hands with soap and warm water before and after leaving the room or using the bathroom.
- Contact precautions. People who are hospitalized with *C. diff* have a private room or share a room with someone who has the same illness. Hospital staff and visitors wear disposable gloves and isolation gowns while in the room.
- Thorough cleaning. In any setting, all surfaces should be carefully disinfected with a product that contains chlorine bleach. *C. diff* spores can survive routine cleaning products that don't contain bleach.
- Avoid unnecessary use of antibiotics. Antibiotics are sometimes prescribed for viral illnesses that aren't helped by these



drugs. Take a wait-and-see attitude with simple ailments. If you do need an antibiotic, ask your doctor to prescribe one that has a narrow range and that you take for the shortest time possible.

Where can I get more information?

- Your personal healthcare provider
- [Centers for Disease Control & Prevention](#)
- [American Academy of Family Physicians](#)

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