



MARCH 6, 2024

# About C. diff

## KEY POINTS

- C. diff is a germ (bacterium) that causes diarrhea and colitis (an inflammation of the colon) and can be life-threatening.
- C. diff can affect anyone. Most cases of C. diff occur when you've been taking antibiotics for something else or not long after you've finished.
- Talk with a healthcare professional about your risk for developing C. diff.

## What it is

*Clostridioides difficile* [klos-TRID-e-OY-dees dif-uh-SEEL], formerly known as *Clostridium difficile* and often called C. difficile or C. diff., is a germ (bacterium) that causes diarrhea and colitis. Colitis is an inflammation of the colon.



### By the numbers

- C. diff is estimated to cause almost **half a million infections** in the United States each year.
- About **1 in 6 patients** who get C. diff will get it again in the subsequent 2-8 weeks.
- **One in 11 people** over age 65 diagnosed with a healthcare-associated C. diff infection die within one month.

## Symptoms

- Diarrhea
- Fever
- Stomach tenderness or pain
- Loss of appetite
- Nausea

## Complications

### Common complications

- Dehydration
- Inflammation of the colon, known as colitis

### Rare complications

- Serious intestinal condition, such as toxic megacolon
- [Sepsis](#), the body's extreme response to an infection
- Death

## People at risk

*C. diff* can affect anyone, but most cases occur when someone is taking antibiotics for something else or not long after they have finished. People are **7 to 10 times more likely** to get *C. diff* while on antibiotics and during the month after.

That's because antibiotics that fight bacterial infections by killing bad germs can also kill the good germs. These good germs protect the body against harmful infections, like *C. diff* infection. If you take antibiotics for more than a week, you could be even more at risk.

Other *C. diff* risk factors include:

- Older age (65 or older)
- Recent stay at a hospital or nursing home
- A weakened immune system, such as organ transplant patients taking immunosuppressive drugs or people with HIV/AIDS or cancer
- Previous infection with *C. diff* or known exposure to the germs

You can still get *C. diff* even if you have none of these risk factors.

*C. diff* is more common in healthcare settings, such as hospitals and nursing homes. This is because many people carrying *C. diff* stay or get treated in those facilities.

## Causes and spread

*C. diff* germs spread from person to person in poop (stool), but the bacteria are often found in the environment.

When *C. diff* germs are outside the body, they become spores. These spores are an inactive form of the germ and have a protective coating allowing them to live for months or years on surfaces and in the soil. The germs become active again when you swallow these spores and they reach the intestines.

Healthy people don't get infected often even if the spores reach their intestines. If your immune system is weak or you've recently taken antibiotics, you could get sick. Taking antibiotics can affect your microbiome, making you more susceptible to illnesses like *C. diff*.

## The microbiome

The microbiome is the collection of good and bad germs that live in your stomach and intestines, your mouth, your urinary tract and on your skin. Some of those germs can cause illness, but others are very important in keeping you healthy. A healthy microbiome helps protect you from infection.

Antibiotics disrupt your microbiome, wiping out both the bad and the good germs that protect the body against harmful infections, like *C. diff* infection. The effect of antibiotics can last as long as several months. If you come in contact with *C. diff* germs during this time, you can get sick.

## Prevention

Reduce the spread of *C. diff* by washing your hands with soap and water after using the bathroom and always before you eat. You can take steps to reduce your risk of *C. diff*.

Keep Reading:

[Preventing C. diff](#)

## Diagnosis

If a healthcare professional suspects *C. diff*, they will review your symptoms and order a lab test of a stool (poop) sample.

Developing diarrhea is common while on or after taking antibiotics. Only in a few cases is that diarrhea caused by *C. diff*. If your diarrhea is severe, do not delay getting medical care.

If you have been taking antibiotics recently and have symptoms of *C. diff*, contact a healthcare professional.

## Treatment and recovery

- Treatment for *C. diff* usually involves taking a specific antibiotic such as vancomycin or fidaxomicin for at least 10 days.
  - If you were taking an antibiotic for another infection, the healthcare professional might ask you to stop taking it if they think it's safe to do so.

- The healthcare team might admit you to the hospital. In this case, they will use certain precautions, like wearing gowns and gloves to prevent the spread of *C. diff* to themselves and other patients.

Some people get *C. diff* over and over again.

- If you start having symptoms again, seek medical care.
- For those with repeat infections, innovative treatments, including fecal microbiota transplants, have shown promising results.

## What CDC is doing

CDC works with both federal and public health partners to reduce *C. diff* infections.

*C. diff* infections are an urgent problem in hospitals, nursing homes, and in communities. CDC is involved in education, research, and tracking and reporting efforts to reduce *C. diff* infections.

**Keep Reading:**  
[C. diff Initiatives](#)

---

### SOURCES

**CONTENT SOURCE:**  
[National Center for Emerging and Zoonotic Infectious Diseases \(NCEZID\)](#)