

# Clostridium difficile infection

Information for patients  
and visitors

## What is Clostridium difficile infection?

Clostridium difficile (C. difficile) is an infection which may cause mild to severe diarrhoea or, more unusually, severe inflammation of the bowel. It usually causes illness when the balance of bacteria in the gut is disturbed. People aged 65 years or over are more susceptible to contracting the infection.

C. difficile can be prevented with good hygiene – for example washing hands with soap and water and keeping environmental surfaces (floors, bedpans, toilets) clean. It can be treated successfully with antibiotics.

Nevertheless it can be a serious infection leading to a longer stay in hospital and in the most severe cases can be life threatening.

## How do you catch it?

C. difficile can cause illness when certain antibiotics disturb the balance of 'normal' bacteria in the gut. It is possible for the infection to spread from person to person as those suffering from C. difficile associated disease shed spores in their faeces. Spores can survive for a very long time in the environment and can be transported on the hands of infected patients or people who have had direct contact with them. Infection may also be spread through contact with environmental surfaces contaminated with C. difficile.

## What are the symptoms of C. difficile infection?

The effects of C. difficile can vary from diarrhoea of varying severity to possible severe inflammation of the bowel, although this is rare. Other symptoms can include fever, loss of appetite, nausea and abdominal pain or tenderness.

## How do we diagnose C. difficile infection?

It is difficult to diagnose C. difficile infection on the basis of its symptoms alone. The infection is normally diagnosed by carrying out laboratory testing which shows the presence of the C. difficile toxins in the patient's faeces (stool) sample.

## Who does it affect? Are some people more at risk?

The risk of catching C. difficile increases in patients with the following:

- Advanced age – elderly people are most at risk. Over 80% of cases are reported in the over 65 age group
- Antibiotic exposure – antibiotics may alter the 'normal' bacteria in the gut and increase the risk of developing C. difficile diarrhoea
- Gastrointestinal surgery/manipulation repeated enemas and/or gut surgery increase a person's risk of developing the disease
- Immuno-compromising conditions (where the immune system and therefore the ability to fight infection is not working effectively)
- A serious underlying illness
- Long length of stay in healthcare settings

Children under the age of 2 years can be affected but this is not common.

### **How can it be treated?**

C. difficile can be treated with specific antibiotics.

There is a risk of relapse (recurrence of infection) in 20-30% of patients and other treatments may be tried, including pro-biotic (good bacteria) treatments, with the aim of re-establishing the balance in the gut. Most people affected by C. difficile make a full recovery. However, elderly patients with other underlying conditions may be more badly affected.

### **What should I do to prevent the spread of C. difficile to others?**

Washing hands with soap and water is the single most effective method of prevention. Hands should always be washed after using the toilet and before eating. The other important preventative measure is to keep surfaces in bathrooms, kitchens and other areas clean, using a bleach-based disinfectant.

If you are washing clothes at home you should always wear gloves when handling items that may have become soiled. Clothing should be washed separately from your normal load and at temperatures of 60°C.

## How can hospitals prevent the spread of C. difficile?

Unfortunately patients with diarrhoea, especially if severe or accompanied by incontinence, may unintentionally spread the infection to other patients, which may lead to outbreaks of C. difficile in hospitals. In addition, the ability of this bacterium to form spores enables it to survive for long periods in the environment (for example on floors and around toilets) and disperse in the air, for example during bed making.

If there is a possibility that the diarrhoea is infectious, whether it is suspected or confirmed C. difficile, the patient is placed in isolation to prevent other patients from being exposed.

Staff should wear disposable gloves and aprons when caring for infected patients and affected patients will be segregated from others. At Royal Free London hospitals rigorous cleaning and disinfection with a chlorine-based disinfectant is carried out to remove spores from affected areas.

Hand washing with soap and water is required for all staff, visitors and patients. Alcohol gels are not effective against C. difficile spores. In an outbreak situation, the infection control and prevention team will introduce special measures for staff, patients and visitors to follow.

## Is *C. difficile* any more difficult to remove from the environment than other hospital infections?

*C. difficile* are types of bacteria that produce resistant spores that are able to persist in the environment longer than other bacteria.

Alcohol hand gels will not kill them, but they can be removed with soap and water. Staff, patients and visitors need to wash hands with soap and water in addition to using alcohol hand gels. Disinfectants containing bleach need to be used on surfaces and floors to ensure that the spread of infection is controlled.

## Will it affect you going home?

You will be able to go home when you are symptom free (ie no longer have diarrhoea). Once someone has recovered clinically they are not a risk to others, even if they continue to carry *C. difficile* in their stool, as long as they wash their hands with soap and water after using the toilet.

The expert advice is that a patient who has recovered from diarrhoea and is continent presents no risk of environmental contamination or cross infection. There is no reason why a patient who has recovered from *C. difficile* cannot go home, move to a community hospital or return to a care home or nursing home.

**If you have any further questions please contact our  
infection prevention and control team on:**

Barnet Hospital: 020 8216 4454

Chase Farm Hospital: 020 8216 4454

Royal Free Hospital: 020 7472 6607

## For more information please visit:

- NHS Choices  
[www.nhs.uk/conditions/Clostridium-difficile](http://www.nhs.uk/conditions/Clostridium-difficile)
- Public Health England  
[www.gov.uk/government/collections/clostridium-difficile-guidance-data-and-analysis](http://www.gov.uk/government/collections/clostridium-difficile-guidance-data-and-analysis)

**This leaflet is available in other languages, large print, Braille and audio format upon request; please ask a member of staff.**

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