

# Clostridium difficile infection

**Information and advice for  
people with Clostridium  
difficile who are not in  
hospital**

Produced in partnership by  
NHS Calderdale, NHS Kirklees, NHS Wakefield District,  
Calderdale and Huddersfield NHS Foundation Trust,  
Mid Yorkshire Hospitals NHS Trust and Locala Community Partnerships.

## **What is Clostridium difficile?**

Clostridium difficile, sometimes called C.difficile or C.diff is a bacterium (germ). It lives harmlessly in the gut (bowel) of many people. Approximately 3 in 100 healthy adults and up to 7 in 10 healthy babies have a number of Clostridium difficile bacteria living in their gut. We all have many types of harmless bacteria that live in our gut and for those who have small numbers of Clostridium difficile bacteria these are kept in check by the other gut bacteria.

## **How is it spread?**

Clostridium difficile produces spores (like seeds) and these can survive in the environment for many months. The spores get into the environment when someone who has Clostridium difficile has diarrhoea, these spores then land on surfaces, clothing or hands. They can enter the mouth and gut via food. Spores that get into the gut can develop into bacteria and this is how people can have Clostridium difficile harmlessly in their gut.

## **Why does it happen?**

Usually antibiotics are the main cause of the infection. If you take a course of antibiotics for an infection e.g. for a chest infection or urinary tract infection those antibiotics as well as killing the bacteria that cause your initial infection will also kill many of the harmless bacteria living in your gut. If Clostridium difficile is in your gut it will then allow the numbers of those bacteria to multiply greatly. Once this happens the Clostridium difficile start to produce toxins (poisons) and these attack the gut and cause the symptoms of Clostridium difficile infection.

## **What problems does it cause?**

The Clostridium difficile bacteria make toxins which can cause inflammation and damage to the wall of the lower gut. This causes watery diarrhoea, often with mucous and an offensive smell. Other symptoms include loss of appetite, nausea (feeling sick), fever and abdominal pain or tenderness. These symptoms can last from a few days up to several weeks and sometimes the symptoms can go away without treatment.

In some cases pseudomembranous colitis can develop, colitis means inflammation of the colon and pseudomembranous means that if you looked inside the colon you would see membrane-like patches. This can cause bloody diarrhoea, fever, abdominal pain, swollen abdomen and colon and make you feel very unwell. In rare cases it becomes life-threatening and the colon may perforate (rupture).

## **Who is at risk of infection?**

*Clostridium difficile* infection can occur in people who are in, or have recently been in hospital. It can also affect people in care homes or in their own home.

*Clostridium difficile* infection is more common in older people with more than 8 out of 10 cases reported in those over the age of 65. People of all ages with serious underlying illnesses are more at risk as well as those who have had bowel surgery or procedures or have conditions which affect their gut. Taking antibiotics is also a risk. Symptoms can start within a few days of starting antibiotics, but may not occur for up to 10 weeks.

If you have had *Clostridium difficile*, there is a 1 in 5 chance of the infection recurring.

## **How is it diagnosed?**

As diarrhoea can happen as a side effect of taking certain types of antibiotics or for other reasons such as a viral infection or food poisoning a sample of diarrhoea is tested to see if *Clostridium difficile* is present. The laboratory examine the sample for the presence of the *Clostridium difficile* toxins. Once the diagnosis is confirmed no more specimens are needed. Generally the only instance when another specimen is needed is when symptoms resolve and then recur or if symptoms carry on despite treatment.

## **What is the treatment?**

Stopping the antibiotics you are taking is sometimes all that is needed in mild to moderate cases but you should never do this without speaking to your doctor to decide if it is safe to do so. This then allows the harmless bacteria to multiply in your gut and the symptoms should then ease. Those with more severe diarrhoea or colitis will normally be given a different antibiotic to treat the infection. It is important to complete the course even if your diarrhoea settles down and you begin to feel better.

As with any episodes of diarrhoea it is important to drink plenty of fluids to replace some of the fluids that are lost by having diarrhoea. Medication used to prevent constipation is usually stopped whilst someone has diarrhoea. In some cases extra fluid and medication is given in hospital. In rare cases surgery is needed if the bowel perforates. It is not advisable to take medicines to stop diarrhoea like Imodium/Loperamide unless informed to do so by your doctor.

## **Where will I receive treatment?**

You will usually be able to have the treatment for your infection at home. During this time symptoms generally start to improve. If symptoms do not improve or the infection is severe you might need to go into hospital for more treatment. It is advisable to stay at home until two days after symptoms have resolved. If you live in a care home you will need to stay in your own bedroom for this time.

## **How can I help**

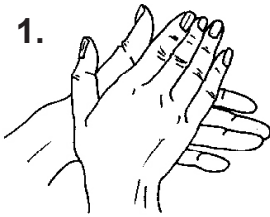
You can play an important role in reducing the risks of infection spreading. To prevent *Clostridium difficile* spreading to others or to prevent you developing the infection again hand washing is essential. Even though your hands may appear to be clean, the *Clostridium difficile* bacterial spores are too small to be seen and may still be present. It is essential to wash your hands well after visiting the toilet or before handling food.

Keep nails short and clean. If you are sharing soap use liquid soap if possible rather than a bar of soap. Do not use alcohol hand gels as they are not effective against this infection.

## How to effectively wash your hands

- Wet both hands with warm water.
- Use enough soap to get a good lather.
- Rub hands together making sure all areas of the hands are covered, with particular attention to nails, fingertips and between fingers.
- Rinse and dry hands well.

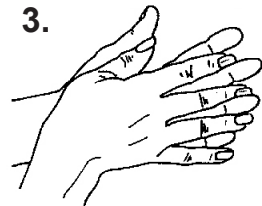
### Wash ALL surfaces of the hands



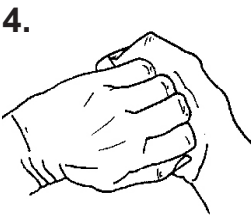
**Rub palm to palm**



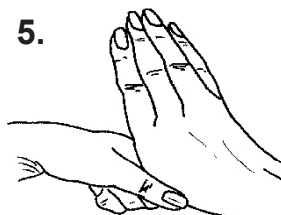
**Rub the backs of both hands**



**Rub palms again with fingers interlaced**



**Rub backs of interlaced fingers**



**Rub both thumbs**



**Rub all fingertips onto palms**

The six steps take about 15 seconds.

Rinse and dry hands well.

## **Are there things that I need to do around the house**

To prevent *Clostridium difficile* living in the environment good cleaning is essential, as the spores are very hardy and are able to survive for months.

### **Toilet and bathroom**

As this is the area where *Clostridium difficile* is most likely to be found thorough cleaning of the toilet area including toilet seat, flush handle or button, toilet bowl, washbasin and taps is necessary. You will need to use warm water and detergent followed by a chlorine containing disinfectant e.g. household bleach to destroy the spores as they have a hard coating, following the manufacturers instructions. If at all possible use a separate toilet from the rest of your family whilst you are unwell.

### **Laundry**

Any clothing, bedding or towels soiled with faeces should be washed separately from other washing, in a washing machine at the highest temperature possible for that fabric, 60° or above if possible. Do not share towels and flannels with others. Once your diarrhoea has gone there is no need to separate items.

### **Kitchen**

Surfaces should be cleaned with a detergent and warm water before and after food preparation.

## **Will other family members/guests in my home be affected?**

People in good health do not usually get a *Clostridium difficile* infection. There is very little risk to healthy family members and other visitors (including pregnant women and children), as long as they wash their hands. Elderly or frail family and friends or those whose immune systems are weak are more at risk of *Clostridium difficile* and it is important not to visit them until your diarrhoea has stopped.

## **How will I know when the infection has gone?**

When your normal bowel habit returns, the infection is gone and the balance of bacteria in your bowel is back to normal.

## **What precautions should my personal carer/nurse take?**

As well as hand washing with soap and water, your care worker or nurse will wear a pair of gloves and a plastic apron when helping with care. The gloves and aprons are used only once, and will be thrown away when they have finished. They will then wash their hands again.

## **Is my pet at risk from the infection?**

No, *Clostridium difficile* does not present a risk to your pets.

## **When can I return to work?**

You can return to work once your bowel habit has returned to normal and you have had no diarrhoea for 48 hours. If you work within healthcare or the food industry you should inform your manager/occupational health department you have had a *Clostridium difficile* infection.

## **What if the diarrhoea returns?**

Please contact your GP if you start to experience any symptoms again.

## **What if I need to take antibiotics in the future?**

If you need antibiotics in the future it does not mean you will definitely develop this infection again, but do tell the healthcare professionals caring for you that you have had *Clostridium difficile* in the past and show them your *Clostridium difficile* card.

## **Who can I go to if I have more questions?**

If you have any clinical queries about your condition please contact your GP. If you have general enquiries about the management of *Clostridium difficile* you can contact your local infection prevention and control team.

# The card that makes a difference

Please show this card whenever you visit a doctor, pharmacist, dentist or other healthcare provider.

If you have a Clostridium difficile infection and have not received this card please contact your GP surgery.

