

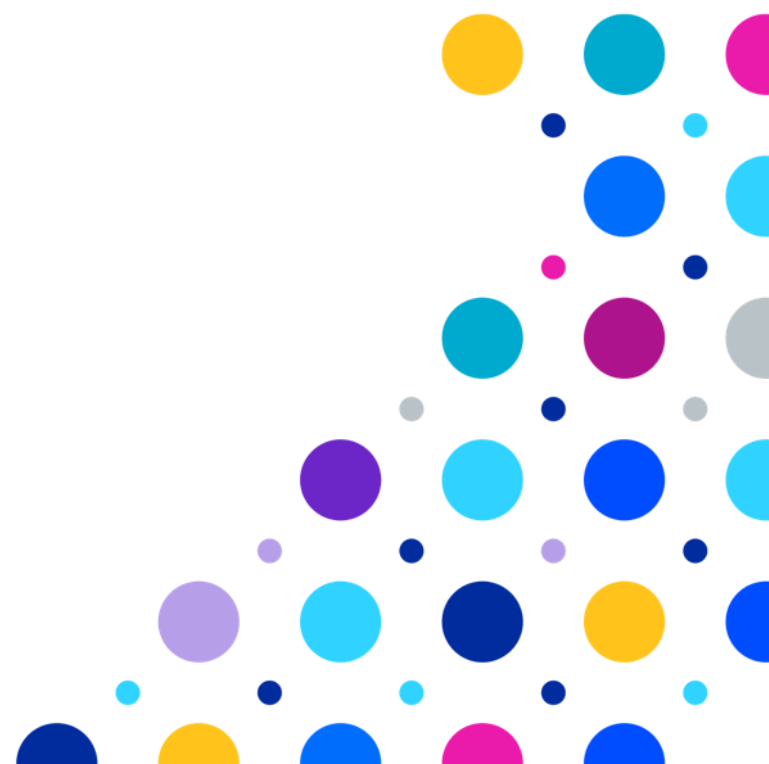
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Clostridioides difficile infection

Safety and Quality First 



What is Clostridioides difficile?

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What is Clostridioides difficile?



- Clostridioides difficile, also known as C. difficile, C. diff or CDI, are bacteria that are present naturally in the gut. Some people can be healthy with CDI.
- Some antibiotics that are used to treat other health conditions can interfere with the balance of 'good' bacteria in the gut. CDI bacteria can multiply and produce toxins (poisons), which cause illness such as diarrhoea and fever.
- CDI bacteria spread very easily. Despite this, CDI infections can usually be prevented by practising good hygiene in healthcare environments, such as washing hands regularly and cleaning surfaces using disinfectants.
- Most people with a CDI infection make a full recovery. However, in rare cases, the infection can be fatal



How do you catch it?



- CDI can be acquired naturally as the spores are present in soil and there have been suggestions that some foods can carry CDI.
- CDI can cause illness when certain antibiotics used to treat other health conditions disturb the balance of 'good' bacteria in the gut.
- It is possible for the infection to spread from person to person because those suffering from Clostridioides difficile-associated disease shed the germ in their faeces.
- If hands are not cleaned before eating it is possible for humans to pick up spores from the environment and for them then to get into the body.



What are the symptoms of CDI infection?



The effects of CDI can vary from nothing to diarrhoea of varying severity and much more unusually to severe inflammation of the bowel.

The symptoms of CDI infection can include:

- mild to severe diarrhoea
- blood-stained stools
- fever
- dehydration
- cramps in the abdomen (tummy)

CDI can cause an infection of the lining of the abdomen (peritonitis), blood poisoning (septicaemia) and tears in the large intestine (perforation of the colon).



How do doctors diagnose and treat CDI infection?



Diagnosis:

- Stool Sample sent to a microbiologist
- Scope to look into the bowel to confirm diagnosis (colonoscopy)

Treatment:

- Mild or moderate symptoms of CDI infection, it is best to stop taking the antibiotics that may have caused the infection
- Severe symptoms, such as severe diarrhoea or colitis (swelling and irritation of the lining of the bowel), you may need to take an antibiotic that can kill CDI bacteria.
- Serious cases of CDI infection, surgery may be needed to repair damage to the intestines (bowel), especially if there are tears in the lining of the small intestine.





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



People most vulnerable to a CDI infection are those who:

- Have been treated with broad-spectrum antibiotics (antibiotics that can treat different types of bacteria)
- Have had to stay for a long time in a healthcare setting, such as a hospital
- Are over 65 years old
- Have a serious underlying illness or condition
- Have a weakened immune system



Routes of transmission



The main routes of transmission of C diff spores are:

- Hands of staff and service users
- Contact with contaminated surfaces or equipment e.g. commodes, toilet flush handles, door handles and toilet assistant rails



What should I do to prevent the spread of CDI to others?



- Healthcare workers should wear disposable gloves and aprons when caring for anyone who has a CDI infection.
- Whenever possible, people who are infected with CDI should have their own room and toilet facilities to avoid passing the infection onto others.
- Isolation signs should be visible on the service users doors. Doors should be kept closed where possible at all times, except for entry and exit.
- Staff, patients and visitors should be encouraged to wash their hands regularly and thoroughly. Alcohol hand gel is not effective against CDI spores, so the use of soap and water is essential.
- Surfaces that may have come into contact with the bacteria or spores, such as toilets, the floor around toilets, bedpans and beds, should also be cleaned thoroughly with disinfectants with proven effectiveness against CDI.



Management and treatment










The service user should be reviewed by their GP promptly:

- Inciting antibiotics should be stopped, if possible, as should other drugs that may cause diarrhoea.
- Supportive care needs to be given to the service user; hydration, nutrition and electrolyte balance.
- A care pathway should be commenced and bowel motions should be recorded on a stool chart.
- The severity of the illness should be documented in the care plans or the service users records.



Bristol Stool Chart

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fully plastic with ragged edges, a mushy stool
Type 7		Watery, no solid pieces, entirely liquid



Enhanced resident monitoring



In the event of a service user being suspected or confirmed with CDI the following measures need to be implemented:

- Enhanced monitoring of other service users for symptoms especially the ones who are on antibiotics
- Other service users who develop diarrhoea stools should be isolated immediately and have a stool specimen sent, commence fluid balance and stool chart immediately
- Staff wearing own clothes for work should ensure they wash there clothes on the highest heat recommended be the manufacturer.



Ending isolation



- When a resident has been diarrhoea free for 48hrs and has passed a formed stool (type 1-4 on the Bristol stool chart) or their bowel habit has returned to their normal type, they are no longer infectious and isolation precautions are no longer required.
- Their room at this point needs to be cleaned and disinfected.
- A negative stool sample is not required.



Could I bring the infection home with me?



- Wash your hands before and after contact with the patient, and before handling food.
- Do not use the same towel or face cloth as someone who has a healthcare associated infection.
- All staff should wear PPE for all contact with laundry. Wash laundry from an infected patient at 65 degrees or above. If possible use water soluble alginate bags (red).
- If anyone has presented signs of diarrhoea or vomiting clear up soiling accidents straight away, wash with hot soapy water and disinfect with a chlorine disinfectant or bleach.
- Disinfect door and toilet handles, taps and the toilet seat after use and disinfect the toilet bowl frequently.



Effective hand-washing



- Alcohol gel is not effective at eradicating the spores therefore washing with soap and water is important. Keep fingernails clipped and short and avoid wearing rings and jewellery.
- Ensure hands are washed before and after patient contact, after visiting the toilet and before eating.
- In an outbreak situation (more than 2 cases of diarrhoea), the Infection Control Team may introduce special measures for staff, patients and visitors to follow.
- Encourage visitors
 - wash your hands with soap and water when entering and leaving areas
 - observe visiting hours and all visiting guidelines
 - make sure they know to avoid the healthcare environment if they are feeling unwell or have recently had diarrhoea.



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Any Questions?





THANK YOU