Gloucester City Council

Factsheet

CLOSTRIDIUM DIFFICILE

What is Clostridium difficile?

Clostridium is a cause of diarrhoea, which is usually acquired in hospital. Although in most cases it causes a relatively mild illness, occasionally and particularly in elderly patients, it may result in serious illness and even death. Spores are produced when Clostridium difficile bacteria encounter unfavourable conditions, such as being outside the body. They are very hardy and can survive on clothes and environmental surfaces for long periods.

What are the symptoms of Clostridium difficile?

C. difficile infection is usually acquired in hospital, and almost all patients who develop C. difficile diarrhoea are taking, or have recently been given, antibiotic therapy. Diarrhoea is the most common symptom but abdominal pain and fever may also occur. In the majority of patients, the illness is mild and full recovery is usual, although elderly patients may become seriously ill with dehydration as a consequence of the diarrhoea.

How is the disease diagnosed?

C. difficile infection should be considered in any patient who develops diarrhoea and who is taking an antibiotic, or who has received a course of antibiotics in the past few weeks. The most reliable way of confirming the diagnosis is by testing faecal samples for the presence of Clostridium difficile toxins.

How is Clostridium difficile treated?

Most patients develop only a mild illness and stopping the antibiotics, if clinically possible, together with fluid replacement, either by mouth or intravenous drip, usually results in rapid improvement. Sometimes, it is necessary to give specific therapy against C. difficile itself. Two antibiotics are known to be effective in treatment. There is a risk of a relapse of symptoms in about 20-30% of patients and further courses of these antibiotics may be required.

How is Clostridium difficile spread?

People with Clostridium difficile infections carry the bacteria in their intestines. The bacteria produce a spore which is shed in the faeces of the infected person.



ENVIRONMENTAL HEALTH

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The bacteria can then be passed:-

- Person to person through direct contact.
- Environmental contamination e.g. bedding, commodes, bed pans, sinks, anal thermometers, handrails etc.
- Hands of health care workers when they move between patients.

How can we prevent Clostridium difficile infection?

- 1. Good, thorough hand washing particularly:-
 - · After handling contaminated waste.
 - Before eating/feeding.
 - Before and after providing personal care.

(Alcohol gel should not be relied on solely as it does not kill the spores)

Patients with diarrhoeal disease must be isolated until they have been symptom free for 48 hours.

- 2. Wear disposable gloves and plastic aprons whenever dealing with body fluids or excretions, contaminated items and linen from a patient.
- 3. Environmental Cleaning
 - Thorough and rigorous cleaning is essential to prevent transmission of Clostridium Difficile. Faeces must be disposed of safely and promptly. All equipment that has come into contact with the patient must be cleaned with warm water and detergent then disinfected with sodium hypochlorite 0.1% (1000ppm), rinsed then dried. Mattresses and pillows must have impermeable covers. Care must be taken that all equipment is cleaned thoroughly.
- 4. Linen must be dealt with as infected and placed into a soluble linen bag then into a white bag and transported to the laundry. Affected linen should be washed separately from other linen. Take care not to carry or store soiled linen through/in kitchens.
- 5. Following discharge of the patient, the room and its contents should be cleaned thoroughly with warm water and detergent followed by disinfection with sodium hypochlorite 1000ppm (0.1%). Special attention should be paid to remove all faecal soiling, and in particular to cleaning of furniture, fittings and horizontal surfaces. Mattresses and pillow covers should also be cleaned and disinfected with sodium hypochlorite 1000ppm (0.1%).

What is the risk to health care workers and patients' relatives?

Because most patients with this condition have recently received antibiotics, hospital staff such as nurses and doctors, and patients' relatives are at little risk of catching the illness themselves. However, should these people be receiving antibiotics then they may be at some risk of infection, and therefore they should be especially scrupulous in their hand washing.

Summary:

Common causes:

Antibiotic therapy

Person to person spread e.g. hands of health care workers.

Environmental contamination e.g. bedding, commodes.

Prevention of Clostridium difficile:

Good, thorough hand washing.

Wearing disposable gloves and plastic aprons.

Thorough and rigorous cleaning.