

YUKON HOSPITAL CORPORATION

CLOSTRIDIUM DIFFICILE

General Information for patients and visitors

What is Clostridium difficile?

Clostridium difficile is a cause of diarrhea, which may be acquired in hospital. In most cases it causes a relatively mild illness but occasionally, particularly in the very frail and elderly, it can be quite serious. If a patient is taking or has taken antibiotics and gets diarrhea, they may have a *C.difficile* infection. Patients at an increased risk of the infection are the elderly and those on antibiotics.

What type of illness does it cause?

Almost all patients who develop this type of diarrhea are taking, or have recently been given, antibiotics. Diarrhea is the most common symptom but stomach pains and fever may also occur. For most people this is a mild but uncomfortable illness and they will make a full recovery. Some elderly patients can become ill with dehydration caused by the diarrhea and occasionally patients may develop more serious bowel problems. It is rare for *C. difficile* to spread to other parts of the body such as the blood stream.

How is the disease diagnosed?

Diagnosis is confirmed by the laboratory following the testing of a feces specimen (stool sample) must be obtained should *C.difficile* be suspected. Usually, if a diagnosis is confirmed, further samples will not be taken unless there is a relapse after treatment. Sometimes a direct examination of the bowel can help confirm diagnosis. This involves taking a small tissue sample for analysis but is not done very often. Taking X-rays can also help in diagnosis.

How is Clostridium difficile treated?

If patients have a mild illness, stopping their antibiotics (if clinically possible) and replacing lost fluids - either by mouth or intravenous drip - usually leads to a rapid improvement in their health. However it is sometimes necessary to give specific treatment against *C. difficile* and two antibiotics – metronidazole and vancomycin - are very effective. Metronidazole is taken by mouth and often prescribed as the first choice. However if this does not work, vancomycin, which is also taken by mouth, can be tried. Some patients may need more than one course of antibiotics.

How is the spread of Clostridium difficile controlled?

The most effective way to prevent the bacteria from spreading is by hand washing and that includes staff thoroughly washing their hands before and after contact with the patient. Patients should always be encouraged to wash their hands after toileting. Patients with diarrhea may unintentionally spread the infection to other patients and outbreaks of *C. difficile* have been described in

hospitals. Because the bacteria may form spores, it can survive for long periods of time in the environment - for example on floors and around toilets. If possible, infected patients are therefore segregated from non-infected patients, usually in a single room. Staff will wear disposable gloves and gowns when caring for infected patients. Rigorous cleaning with warm water and detergent is probably the most effective means of removing the spores from the environment.

Is there a risk to health care workers and patients' relatives?

Because most patients with this condition have recently received antibiotics, doctors, nurses and other health care workers and patients' relatives are at little risk of catching the illness. However if any of these people are receiving antibiotics there could be some risk of infection and they should pay special attention to their hand washing.

How can this infection be prevented?

The key to preventing and controlling the spread of this infection is the sensible use of antibiotics and good hygiene. If at all possible, only short courses of antibiotics are prescribed which only kill a small range of bacteria. These are preferred to broad-spectrum ones that affect a wide range of bacteria.

This minimizes any bacterial changes in the bowel, which is a key factor in developing the condition. When a patient is identified as having *C. difficile* diarrhea the infection control measures described will reduce the risk of it spreading to others.

If you have concerns or comments you may contact the Yukon Hospital Corporation Infection Control Practitioner on (867) 393-8933.