

Occupational Therapy Students

Infection Control

We are governed by [The Health Act 2006](#) published by The Department and Health which provides us with A Code of Practice for [The Prevention and Control of Health Associated Infections](#).



Clostridium Difficile

What is Clostridium Difficile?

Clostridium Difficile (C.diff) is a bacteria that lives in the gut of around 1 in 30 healthy adults and children. When it multiplies C.diff produces spores that are present in the faeces, can survive for a long time in the environment, and are resistant to 'normal' disinfectants. The normal bowel contains millions of different types of bacteria, which help break down and digest our food. There are lots of these 'good' bacteria, but also some bacteria, such as C.diff, which can cause ill health. The 'good' bacteria usually help keep C.diff in check.

How do you catch C.diff?

A few people carry C.diff but remain in good health. People can become infected with C.diff if they touch items or surfaces (such as beds and equipment) that have been contaminated with C.diff spores and then touch their mouths.

If the 'good' gut bacteria are not able to keep C diff in check, or if the body's resistance to infection is lowered, C.diff can multiply and produce spores and toxin. The toxin can cause inflammation of the bowel. This most often happens when people take antibiotics to treat other infections (the antibiotics kill off the 'good' gut bacteria), or if patients' immunity is lowered by chronic or serious ill health, surgery, or drugs.

What are the symptoms of C.diff?

Bowel symptoms range from mild tummy upset to moderate loose stools to severe painful bloody diarrhoea. Other symptoms include fever, loss of appetite, nausea and abdominal pain.

How is C.diff diagnosed?

C.diff is diagnosed by testing for C.diff toxin in a stool sample or by examination of the bowel lining with a special camera (sigmoidoscopy).

Are some patients more likely to be made ill by C.diff?

Elderly patients, patients who have received antibiotics, and those whose resistance is lowered by chronic or serious ill health, surgery, or drugs are more likely to be made ill by C.diff.

Can C.diff be treated?

Mild illness usually responds well to stopping antibiotics and preventing dehydration by taking plenty of fluids. In more severe illness anti-C.diff antibiotics are added. Most patients will improve within a few days, and the diarrhoea symptoms typically resolve within two weeks. Anti-diarrhoea medication may make C.diff diarrhoea worse, and is not recommended.

Is it possible to get C.diff more than once?

C.diff infection usually responds well to treatment, but approximately 20% of patients will experience recurrence of diarrhoea symptoms up to several weeks after treatment has finished. A further course of anti-C.diff antibiotics will be effective in almost all patients, and other specialist treatments are available.

If diarrhoea returns after treatment for C.diff infection it is important to restart treatment promptly. If a patient has been discharged home they should visit their GP as soon as possible, taking a stool sample with them. (Sample containers can be obtained from your GP if you have not already got one).

How can C.diff pass from one person to another?

C.diff is spread on hands person-to-person, or environmental surface-to-person. It is always important to wash your hands after using the toilet and before handling food or eating and drinking. In hospitals staff, patients, relatives, and other visitors must all be thorough in their hand-washing with soap and water every time they deliver treatment or visit. Alcohol gel alone is not effective against C.diff –soap and water must be used.

Is C.diff just a problem in hospitals?

People who have had antibiotics or have lowered immunity can develop C.diff illness without any contact with hospital. These community-acquired cases account for approximately 25% of the total.

What is the hospital doing to tackle C.diff?

The prevention of hospital infections is the top clinical priority for the Trust. At NUH we do everything we can to prevent C.diff. We are:

- Ensuring staff routinely wash their hands with soap and water before and after touching every patient
- Training all staff in the correct way to wash hands and to clean equipment to prevent cross-infection
- Monitoring and improving cleanliness in all wards and departments
- Minimising the risk of cross-infection by quickly isolation patients with suspected or proven C.diff in a single room or in a separate bay
- Using a new (2007) isolation ward on the Queen's Medical Centre campus
- Using hydrogen peroxide, which kills C.diff spores, to support other deep cleaning on the wards
- Making sure antibiotics are used correctly and prescribed only when absolutely necessary and for the shortest possible time

What can patients and visitors do to help prevent C.diff?

Wash hands carefully and every time with soap and water

Remind staff to wash their hands when they may have forgotten

Methicillin Resistant Staphylococcus Aureus (MRSA)

What is MRSA?

MRSA stands for Methicillin Resistant Staphylococcus Aureus. The MRSA germ belongs to the Staphylococcus Aureus (SA) family.

SA is a common germ. It lives harmlessly on the skin and in the nose of around a third of healthy people. MRSA is a particular type of SA that has developed resistance to most antibiotics.

What causes MRSA?

SA and MRSA cause problems only when they get into breaks in the skin (wounds, cuts, sores) or into the bloodstream, or into normally sterile body cavities (e.g. the bladder) infections are more likely and more serious in patients whose resistance is lowered by a long term ill health, frailty, injury, surgery or drugs. Risk of MRSA is higher in patients with catheters or intravenous drip and in patients on Intensive / critical care. In rare cases MRSA can be fatal.

How can MRSA pass from one person to another?

People may carry MRSA without knowing and some patients may have it before they are admitted hospital. It can be caught and passed on almost anywhere not just in hospital. The MRSA bacteria is spread on hands and skin from person-to-person.

Staff, patients relatives and other visitors can help prevent spread of MRSA by thorough regular hand washing with soap and water and by the use of the alcohol gel found on our hospital wards and at the entrance to wards and clinical areas.

Can visitors catch MRSA?

If visitors hand wash or gel before entering and when leaving wards they will largely protect themselves from becoming colonised with MRSA. Even if they acquire MRSA it will usually cause them no harm, they will probably be unaware, will be temporary, wont need investigated or treated. Visitors who have reduced resistance to infection themselves because of ill health should discuss these risks with the clinical team looking after their relative / friend.

Can MRSA be treated?

MRSA can usually be treated by one of the small number of antibiotics which kill it. Other medications such as antiseptic wash and nasal ointments, are used to remove MRSA from the skin and nose of patients who are susceptible to serious MRSA infection. Patients may be moved to a single room or separate bay to help prevent cross infection.

How do you know if you've got MRSA?

Patients may be unaware they have MRSA because it may not have caused any problems. To identify such 'colonised' people many groups of patients are screened before entering hospital or during their stay by taking skin and nose swabs. Where MRSA is found, patients may be treated in separate areas and offered antiseptic skin and hair washes and ointments to eradicate the MRSA and therefore prevent potential problems.

What is the hospital doing to tackle MRSA?

The prevention of hospital infections is the top clinical priority for the Trust. At NUH we do everything we can to prevent MRSA infections. We are:

- Ensuring staff routinely wash their hands with soap and water or alcohol gel before and after touching every patient.
- Training all staff in the correct way to wash hands and to clean equipment to prevent cross infection.
- Monitoring and improving cleanliness in all wards and departments.
- Minimising the risk of cross infection by quickly isolating patients with MRSA in a single room or separate bay.
- Asking some patients to routinely wash and shower in hospital using an antibacterial shower gel to reduce the number of germs on the skin and / or to use antibiotic nasal cream.
- Screening patients (skin and nose swab) before admission or operation in some specialities and treating with antiseptic wash if MRSA is found.
- Encouraging visitors to handwash with soap and water and to use alcohol gel (found at all bedsides and entrances to wards) every time they enter or leave a ward.

Please Remember To Remove Any Wrist Watches Stoned Rings and Any Clothing Below The Elbow Before Contact With Patients.