



**Countess of  
Chester Hospital**  
NHS Foundation Trust

# **CPE**

**Information for patients,  
staff and relatives**

A large graphic at the bottom of the page features the letters 'CPE' in a white, bubbly, hand-drawn font. The letters are set against a blue circular background with a textured surface. This blue circle is surrounded by several overlapping, curved lines in yellow, green, and red, creating a vibrant, multi-colored border.

**CPE**

## **What does 'Carbapenemase-producing Enterobacteriaceae' mean?**

Enterobacteriaceae are bacteria that usually live harmlessly in the gut of humans. This is called 'colonisation' (a person is said to be a 'carrier'). However, if the bacteria get into the wrong place, such as the bladder or bloodstream they can cause infection. Carbapenems are one of the most powerful types of antibiotics. Carbapenemases are enzymes (chemicals), made by some strains of these bacteria, which allow them to destroy carbapenem antibiotics and so the bacteria are said to be resistant to the antibiotics.

## **Why does carbapenem resistance matter?**

Carbapenem antibiotics are usually administered in hospital and are given directly into the bloodstream. Until now, doctors have relied on them to successfully treat certain 'difficult' infections when other antibiotics have failed to do so. In a hospital, where there are many vulnerable patients, spread of resistant bacteria can cause problems.

## **Does carriage of carbapenemase-producing Enterobacteriaceae need to be treated?**

If a person is a carrier of carbapenemase-producing Enterobacteriaceae (sometimes called CPE), they do not need to be treated. However, if the bacteria have caused an infection then antibiotics will be required.

## **How is carbapenemase-producing Enterobacteriaceae spread?**

If a patient in hospital is carrying this bacteria it can get into the ward environment and can also be passed on by direct contact with that particular patient. For that reason, the patient will normally be accommodated in a single room. Effective environmental cleaning and good hand hygiene by all, staff and patients, can reduce the risk of spread significantly.

## Do I need to be screened?

Screening will be offered if you have shared the same bay (or ward) with a patient who has been found to be carrying carbapenemase-producing Enterobacteriaceae. This screening is offered as there is a slight chance that you could have picked up the bacteria and are carrying it too.

If you previously screened positive for CPE, have transferred in from a hospital abroad, or from a UK hospital that has had patients carrying these bacteria, or if you have been in contact with a carrier elsewhere then screening will be arranged for you and you may be accommodated in a single room with your own toilet facilities at least until the results are known.

## How will I be screened for carbapenemase-producing Enterobacteriaceae?

Screening usually entails taking a rectal swab by inserting it just inside your rectum (bottom). Alternatively, you may be asked to provide a sample of faeces. The swab / sample will be sent to the laboratory and you will normally be informed of the result within two to three days.

If the result is negative, the doctors or nurses may wish to check that another sample is negative before you can be accommodated on the main ward. These measures will not hinder your care in any way. If all results are negative no further actions are required.



# Advice for patients who have a positive result

## What happens if the result is positive?

If the result is positive, do ask your doctor or nurse to explain this to you in more detail. You will continue to be accommodated in a single room whilst in hospital. If you have an infection, you will need to have antibiotics. However, if there are no signs of infection and you are simply 'carrying' the bacteria, no treatment is required.

## How did I 'pick up' carbapenemase-producing Enterobacteriaceae?

Do ask your doctor or nurse to explain this to you in more detail. As mentioned above, sometimes this bacteria can be found, living harmlessly, in the gut of humans and so it can be difficult to say when or where you picked it up. However, there is an increased chance of picking up these bacteria if you have been a patient in a hospital abroad or in a UK hospital that has had patients carrying the bacteria, or if you have been in contact with a carrier elsewhere.

## How will I be cared for whilst in hospital?

You will be accommodated in a single room with toilet facilities whilst in hospital. You may be asked to provide a number of samples, depending on your length of stay, to check if you are still carrying the bacteria. These will probably be taken on a weekly basis. The samples might include a number of swabs from certain areas, such as where the tube for your drip (if you have one) enters the skin, a rectal swab ie a sample taken by inserting a swab briefly just inside your rectum (bottom), and / or a faecal sample. You will normally be informed of the results within two to three days.

## How can the spread of carbapenemase-producing Enterobacteriaceae be prevented?

Accommodating you in a single room, if the result is positive, helps to prevent spread of the bacteria. Healthcare workers should wash their hands regularly. They will use gloves and aprons when caring for you. The most important measure for you to take is to wash your hands well with soap and water, especially after going to the toilet. You should avoid touching medical devices (if you have any) such as your urinary catheter tube and your intravenous drip, particularly at the point where it is inserted into the body or skin. Visitors will be asked to wash their hands on entering and leaving the room and may be asked to wear an apron.

## What about when I go home?

Whilst there is a chance that you may still be a carrier when you go home, quite often this will go away with time. No special measures or treatment are required; any infection will have been treated prior to your discharge. You should carry on as normal, maintaining good hand hygiene. If you have any concerns you may wish to contact your GP for advice.

Before you leave hospital, ask the doctor or nurse to give you a letter or card advising that you have had an infection or been colonised with carbapenemase-producing Enterobacteriaceae. This will be useful for the future and it is important that you make health care staff aware of it. Should you or a member of your household be admitted to hospital, you should let the hospital staff know that you are, or have been, a carrier and show them the letter / card.

