

## Infection prevention and control

# Carbapenemase-producing Enterobacteriaceae (CPE)

### What are 'carbapenemase-producing Enterobacteriaceae'?

Enterobacteriaceae are bacteria that usually live harmlessly in the gut of humans. 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 (proteins) made by some strains of these bacteria which allow them to destroy Carbapenem antibiotics. So the bacteria are said to be resistant to the antibiotics.

### Why does Carbapenem resistance matter?

Carbapenem antibiotics can only be given in hospital 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.

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

We try to ensure that all our information given to patients is accurate, balanced and based on the most up-to-date scientific evidence. If you would like to have details about the sources used please contact [patient.information@christie.nhs.uk](mailto:patient.information@christie.nhs.uk)

For information and advice visit the cancer information centres at Withington, Oldham or Salford. Opening times can vary, please check before making a special journey.



Contact The Christie Hotline for  
urgent support and specialist advice  
**The Christie Hotline: 0161 446 3658**  
Open 24 hours a day, 7 days a week



## **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 did I pick up carbapenemase-producing Enterobacteriaceae?**

As mentioned above, sometimes these bacteria live harmlessly in the gut. This is called 'colonisation' and a person who is colonised is said to be a 'carrier'. 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. Please ask your doctor or nurse to explain this to you in more detail.

## **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, that is a sample taken by inserting a swab briefly just inside your rectum (bottom), and / or a sample of your stools. 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 helps to prevent spread of the bacteria. Healthcare workers will wash their hands regularly. They will use gloves and aprons or gowns 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 if they are providing personal care to you.

## **What about when I go home?**

There is a chance that you may still be a carrier when you go home but quite often the bacteria will go away with time. No special measures or treatment are needed; any infection will have been treated before 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 the hospital, ask the doctor or nurse to give you a letter or card advising that you have had an infection or have been and perhaps still are 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. If you or a member of your household are admitted to hospital, let the hospital staff know that you are, or have been a carrier and show them the letter / card.

## **Where can I find more information?**

If you would like any further information please speak to a member of your care staff, who may also contact the Infection Prevention & Control Team for you. The Public Health England website is another source of information:

[www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/CarbapenemResistance/](http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/CarbapenemResistance/)

## **Infection prevention and control team**

**0161 446 3731**