Infection Control

Information about carbapenemase-producing enterobacteriaceae (CPE)

This leaflet is designed for patients, relatives and the public. It provides information about carbapenemase-producing enterobacteriaceae and aims to answer some commonly asked questions.

What does ‘carbapenemase-producing enterobacteriaceae’ mean?

Enterobacteriaceae are bacteria which live harmlessly in the gut of humans. This is called colonisation (a person is said to be a carrier). However, if the bacteria (germs) get into the wrong place such as the bladder or blood stream 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 can only be given in hospital directly into the blood stream (often by a drip). 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 bacteria need to be treated?

If a person is a ‘carrier’ with no symptoms 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 these 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. Your doctor, nurse or the infection control team can explain this to you in more detail if required.

How will I be cared for whilst in hospital?

You/your relative will be accommodated in a side room with toilet facilities whilst in hospital. You may be asked to provide a number of samples, depending on your length of stay and your clinical condition, to check if you are still carrying the bacteria. The samples might include a number of swabs from various areas of the body such as where the tube for your drip (if you have one) enters the skin, a rectal swab, ie a sample...
which is taken by inserting a swab briefly just inside your rectum (back passage), and/or a faecal sample (stool sample). You will normally be informed of the results within three to five days.

**How can the spread of ‘carbapenemase-producing enterobacteriaceae’ be prevented?**

Accommodating you/your relative in a single room helps to prevent the spread of the bacteria. The most important measure you can take is to wash your hands well with soap and water, especially after going to the toilet. You should avoid touching medical devices such as drips, urinary catheters or wound drains. Healthcare workers (HCW) should decontaminate their hands regularly. They will use gowns and gloves when caring for you. Visitors will be asked to decontaminate their hands on entering and leaving the room and will be asked to wear aprons and gloves whilst visiting.

**What about when I go home?**

Whilst there is a chance you may still be a carrier, when you go home this will not stop you being discharged if the doctors are happy with your progress. Carriage of these bacteria will often go away with time. No special measures are required at home and you should carry on as normal following good basic hygiene practices and maintaining your hand hygiene. If you have any concerns please contact your GP for advice.

**What if I am readmitted to hospital?**

If this happens please make sure that you or your relatives tell the hospital staff that you have had this problem in the past.

**Where can I find further information?**

If you would like any further information please speak to a member of your care staff or contact the infection control team, telephone: 01223 217497.

**Contacts/Further information**

- Infection Control, Addenbrooke’s: Telephone 01223 217497
- Your GP Surgery
- Cambridgeshire and Peterborough Clinical Commissioning Group CCG, Telephone: 01945 482158 or 01733 847375
- [www.cuh.nhs.uk](http://www.cuh.nhs.uk)

**References/ sources of evidence**

- [Journal of Hospital Infection - Carbapenem-resistant organisms - Information for patients, relatives and visitors](https://www.journals.elsevier.com/journal-of-hospital-infection)
We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk.

Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.