

Carbapenemase-producing Enterobacteriaceae: I am colonised have an infection- What does this mean?

Carbapenemase-Producing Enterobacteriaceae (CPE): I am Colonised/Have an Infection – What Does This Mean?

Patient Information

Infection Prevention and Control Department

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What does 'Carbapenemase-producing Enterobacteriaceae (CPE)' 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 carbapenemase resistance matter?

Carbapenemase 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.

Does carriage of CPE need to be treated?

If a person is a carrier of 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 CPE?

Sometimes 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.

How is CPE Spread?

CPE can be spread from one person to another on unwashed hands, on equipment that is contaminated and not been sufficiently cleaned or may be picked up from the environment. This can happen in the community and in hospital.

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 further swabs or samples, to check other sites for the bacteria. The samples might include several swabs from certain areas, such as where the tube for your drip (if you have one) enters the skin, any wounds and a rectal swab, i.e. a sample taken by inserting a swab briefly just inside your rectum (bottom), or a faecal sample. You will normally be informed of the results within two to three days.

How can the spread of CPE be prevented?

Accommodating you in a single room helps to prevent spread of the bacteria. Healthcare workers should wash their hands regularly. They will wear gloves, gown 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 or gel their hands on entering and leaving the room.

What about when I go home?

Before you leave hospital, ask the doctor or nurse to give you a letter or card advising that you have had an infection or have been/are colonised with CPE. This will be useful for the future, and it is important that you make healthcare staff aware of it. Should you or a member of your household be admitted to hospital, you should let the hospital know that you are a carrier and show them the letter/card. Once home you should carry on as normal, in particular maintaining good hand hygiene. Other measures will prevent spread to others:

- Keeping the toilet and bathroom areas clean
- Using separate towels; these are the best ways to prevent spread.

Visiting healthcare workers will clean their hands on arrival, use gloves and wear an apron when caring for you, and clean their hands before and after providing direct care, and on leaving. If you have any concerns, you may wish to contact your GP for advice.

What about my family and visitors?

There is no need for you to advise visitors (unless healthcare visitors) that you are a carrier or have an infection, as long as hygiene measures are maintained. If you have an infection, it is important to work with your healthcare worker to ensure that any discharge from a

wound, for example, is contained within an appropriate dressing to prevent contamination of clothes or soft furnishings.

Are my family at risk of contracting CPE?

CPE's are not a risk to healthy people. The most important measure family members can take is to maintain good personal hygiene, including washing hands with soap and water, especially after going to the toilet. Good hygiene such as keeping toilet and bathroom areas clean and using separate towels are the best ways to prevent the spread. Clothes and laundry in the household should be washed normally at the hottest temperature advised on the label.

Will my close family have to be screened for CPE?

If admitted to hospital, the family member may be asked about close contact (for example living in the same house) as someone known to be a CPE carrier. Following an assessment of risk, they may be screened for CPE as part of the admission procedure.

Where can I find more information?

If you would like any further information, please speak to the nurse or doctor caring for you during your admission or contact your GP if you have been discharged home.



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