

Carbapenemase Producing Enterobacterales (CPE)

What does CPE mean?

CPE stands for Carbapenemase Producing Enterobacterales. Enterobacterales are bacteria (bugs) that usually live harmlessly in your gut. This is called 'colonisation'. People with Enterobacterales are said to be a 'carrier'. However, if the bacteria get into the wrong place, such as in the bladder or bloodstream, they can cause infection.

What are carbapenems?

Carbapenems are one of the most powerful types of antibiotics. Carbapenemases are enzymes (chemicals) made by certain kinds of bacteria, which means they are then able to destroy carbapenem antibiotics. If this happens, the antibiotics can no longer kill the bacteria and they are said to be resistant.

Why does carbapenem resistance matter?

If the bacteria get into the wrong place, such as in the bladder or bloodstream, they can cause infection.

This can be difficult to treat, as carbapenems are often the last option of antibiotics given to patients, and relied on by doctors to treat certain difficult infections when other antibiotics have failed to do so.

Carbapenem antibiotics, such as Meropenem, can only be given in hospital directly into the bloodstream.

In a hospital, there are very vulnerable patients and the spread of resistant bacteria can cause problems.

Why do I need to be tested (screened) for CPE?

Do I need to be screened?

We advise screening to all patients that have:

- Had an overnight stay in a hospital overseas in the past 12 months
- Have been in a hospital in the UK that is known to have had outbreaks of CPE
- Been in contact with another patient with CPE

This screening is offered as there is a slight chance that you could have picked up the bacteria and as a result, be carrying it too.

How will I be screened for CPE?

Screening involves taking a rectal swab, by inserting it just inside your rectum (bottom). Alternatively, you may be asked to provide a sample of faeces.

This is likely to be repeated during your hospital stay. Additional clinical samples may also be requested, for example a urine sample. These samples will be sent to the laboratory and the results should be available after five working days.

Information for Patients

CPE colonises (lives) in the bowel this is why a rectal swab is necessary for this type of test.

What does it mean if the result is positive?

If I am carrying CPE, do I 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.

What if the result is positive?

If the result is positive, ask your doctor, nurse or a member of the Infection Prevention and Control Team to explain this to you in more detail.

You will be given a single room until you leave hospital and hospital staff will wear aprons and gloves to care for you. For personal care, long-sleeved gowns may be used by staff.

No treatment is necessary unless you have an infection. If you do have an infection, antibiotics will be given.

CPE will not restrict you from receiving any medical care that you need. It's important to remember that hand washing is essential to prevent the spread of infection.

You will therefore need to wash your hands frequently, especially after going to the toilet. You should avoid touching any medical devices, for example, urinary catheter tubes or intravenous drips, particularly at the point where it is inserted into your body or skin.

Furthermore, CPE will not restrict you from attending outpatient appointments or sitting in a waiting room. Any therapy assessments that need to be completed prior to discharge can be completed without delay from an infection prevention perspective.

You are welcome to have visitors. We would recommend good hand hygiene before and after leaving your room and instead of sitting on your bed, use the hospital chairs provided.

How can we prevent the spread of CPE?

It is important that we ensure that everywhere is kept clean on the ward to prevent spread to other patients. It is also important for staff and patients to maintain good hand hygiene, including washing hands before meals and after going to the toilet.

What about when I go home?

When you leave hospital, you may still be a carrier of CPE. No special measures or treatment are required before you leave hospital. You should carry on as normal, maintaining good hand hygiene. If you have any concerns, you may wish to contact your GP for advice.

If you are admitted to another hospital or have medical treatment elsewhere, we would recommend that you inform the hospital either on, or prior to, admission.

Useful links

www.gov.uk/government/collections/carbapenem-resistance-guidance-data-and-analysis

Contact

If you have any questions or would like more information, please contact a member of the Infection Prevention and Control Team.

Information for Patients

For Queen Elizabeth Hospital Birmingham
Tel: **0121 371 3785** (internal **13785**)

For Heartlands Hospital, Good Hope Hospital and
Solihull Hospital
Tel: **0121 424 1137**

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