

Carbapenemase-producing Enterobacteriaceae (CPE)

Patient information sheet

What does Carbapenemase-producing Enterobacteriaceae (CPE) mean?

Carbapenemase-producing Enterobacteriaceae (sometimes called CPE) is the name given to a group of bacteria that has become very resistant to antibiotics, including those called carbapenems.

Many of these bacteria usually live harmlessly in the gut of humans or animals and help to digest food. However, if they get into the wrong place, such as the bladder or bloodstream, they can cause infection.

Why does carbapenem resistance matter?

Carbapenems are a group of powerful antibiotics that can only be given directly into the bloodstream in hospital. Until now they were antibiotics which could always be relied upon when other antibiotics failed to treat 'difficult' infections.

If a hospital patient is carrying CPE, then the bacteria can get into the ward environment and could potentially be passed on to other patients, so we take precautions to prevent this from happening.

Does colonisation with CPE need to be treated?

Because CPE normally lives in the gut without causing problems (i.e. 'colonisation'), it does not always need to be treated.

People who are colonised with CPE in the gut which is not causing any infection may be called carriers. However, if you have an infection caused by CPE then treatment is required. Infections caused by this group of bacteria can be very difficult to treat with antibiotics; this is why it is so important to prevent its spread.

How can the spread of CPE be prevented?

Generally, patients who have CPE will be accommodated in a single room with its own toilet facilities.

If you are being cared for in a single room, visitors coming to see you will be asked to wear an apron and to wash their hands on entering and leaving the room.

Healthcare staff (nurses or clinicians) will wash their hands or use alcohol hand gel regularly. They will use aprons or gowns when caring for patients to help prevent the spread of any germs. The most important measure is to wash your hands and, in between hand washing episodes, to use alcohol hand gel regularly while in hospital. It is especially important to wash your hands well with soap and water after going to the toilet.

You should avoid touching any medical devices such as your urinary catheter tube or your intravenous drip, particularly at the point where it is inserted into the skin.

Effective environmental cleaning will also help prevent spread, which is why cleaning is given such a high priority in hospital.

Author ID: Infection control nurse
Department: Infection prevention and control (IPC)
Printed: March 2024
Review date: March 2026
Version: 4
Leaflet number: PI 139



Large print copies and alternative language versions of this leaflet can be made available on request.

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How will I know if I am at risk of CPE?

The main risk factors for CPE are having been in a hospital abroad, in a UK hospital which has had patients carrying this germ or being exposed to other carriers of this germ. If you have these risk factors we will ask to screen you. You will be informed of the result as soon as possible.

How is a CPE screen taken?

The screening method requires a swab to be inserted just into your rectum (bottom). The specimen will be sent to the laboratory. A result will normally take from 48 to 72 hours to be available.

If you are found to have CPE, you may want to know how this happened.

Do ask your doctor or nurse to explain this to you in more detail. As mentioned above, sometimes this group of 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 this up 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.

If I am a carrier of Carbapenemase-producing Enterobacteriaceae, do I need to be treated?

If a person is a carrier of CPE, they do not need to be treated. If the bacteria has caused an infection, antibiotics will be required.

How will I be cared for while in hospital?

You will be accommodated in a single room with toilet facilities while in hospital. You may be asked to have a number of screen tests depending on your length of stay, to check whether 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 and a rectal swab, i.e. a sample taken by inserting a swab briefly just inside your rectum. You will normally be informed of the results within two to three days.

What about when I go home?

Although 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 for carriers. If you had an infection caused by CPE this will have been treated before you are discharged. You should carry on as normal, maintaining good hand hygiene.

It is important that you make any health care staff that you come into contact with 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.

If you have any concerns you may wish to contact your GP for advice.

Where can I find more information?

If you would like any further information please speak to a member of staff on your ward, who may contact the infection prevention and control team for you.

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