

Patient information

Carbapenemase-producing Enterobacterales (CPE)

Infection Prevention and Control Team

What does 'carbapenemase-producing enterobacterales' mean?

Enterobacterales are bacteria that are usually found in the bowel and faeces, where they do not cause harm.

This is called 'colonisation' (a person is said to be a 'carrier'). However, if the bacteria get into a place where bacteria are not normally found, 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.

They are then known as 'Carbapenemase-Producing Enterobacterales' or CPE.

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.

Therefore, 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 is carbapenemase-producing Enterobacterales spread?

If a patient in hospital is carrying the CPE bacteria it can get into the ward environment and can also be passed on by direct physical contact e.g. by hands.

For that reason, the patient will normally be accommodated in a single room. Good hand hygiene by all; staff, patients and visitors can reduce the risk of spread significantly.

Effective environmental cleaning is also important to reduce spread.

How do we know when someone has CPE?

Usually it isn't immediately known that a patient is carrying the CPE bacteria until they have had a CPE screen.

Screening will be undertaken if you have:

- Been transferred from another hospital, in the UK or abroad.
- If you have had a hospital stay as a patient in the last 12 months.
- If you have been a known CPE carrier in the past.
- If you have shared the same bay (or ward) with a patient who has been found to be carrying CPE.

How will I be screened for CPE?

Screening requires a rectal swab to be taken.

The rectal swab is taken by inserting it gently just inside your rectum (anus), rotated and removed. There may be pressure as the swab is inserted into the rectum, but the test is not usually painful.

Alternatively, you may be asked to provide a sample of faeces (stool sample). If you have a colostomy or stoma this site will also have a swab taken.

The swabs will be sent to the laboratory and we will normally have the result within two to three days.

If the result is negative nothing further is required unless you are staying in hospital for some time. Further screening may be required as advised by the Infection Prevention and Control Team.

You will have a further CPE screen every 30 days if you remain in hospital.

What if the result is positive?

If the result is positive:

- Your doctor or nurse should explain this to you in more detail and provide an information leaflet
- You may be given a single room until you leave hospital. This reduces the risk of transmission to other patients
- You should be given an ensuite toilet or commode for your use only.
- Staff will wear apron and gloves when they enter the side room
- No treatment is necessary unless you have an infection when antibiotics will be given.

How can I help to prevent the spread of CPE's?

Clean your hands using soap and water or alcohol gel:

- After using the toilet.
- Before eating or drinking.
- On leaving the single room.
- On entering and leaving the ward.

Maintain a high level of personal hygiene. The nursing staff should assist you if required.

Wear fresh clothing daily or change as required if it becomes soiled

Avoid visiting other patients or sitting on beds

If family or friends are laundering your clothing while you are in hospital advise them to wash the laundry separately from other clothing at 60°C.

If the clothes are soiled the ward staff should provide you with a plastic bag that can be emptied directly into the machine.

Can I have visitors?

Yes, you can. Your visitors will need to follow strict hand hygiene before entering and every time they leave your room. Soap and water or alcohol gel can be used.

They are not required to wear aprons and gloves when entering your room, unless they are helping with your care needs.

What if someone is pregnant?

They are at no more risk than any other visitor.

Laundry

Patients' laundry can be taken home and washed as normal.

If your own clothing does become soiled it will be placed in a plastic bag in the locker to be taken by relatives and laundered.

Wash these clothes separately on the hottest wash suitable for the garment. Remember to wash your hands after handling soiled linen.

What should I do when I am discharged home?

Wash your hands with soap and water often, particularly after using the toilet and when preparing food.

No special measures are required with household cleaning and laundry.

Once you are discharged home there is no reason why you should not continue to join in any activity that you enjoyed before coming into hospital.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is appreciated.

Further information

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