



IPC Advice Bulletin for GP Practices

Issue No. 04 - December 2016

To further support GP staff, here is some information on good infection prevention and control (IPC) practice.

What are Carbapenemase-producing Enterobacteriaceae (CPE)?

Enterobacteriaceae are bacteria that usually live harmlessly in the gut of people. Presence of these bacteria without symptoms is known as 'colonisation' and a colonised person is said to be a 'carrier'.

However, if these bacteria get into a different part of the body, e.g., the bladder, a wound or bloodstream, they can cause infection.

Carbapenemase-producing Enterobacteriaceae, commonly known as CPE, are enterobacteriaceae which have become resistant to carbapenem antibiotics. Their resistance to antibiotics is due to their ability to produce enzymes called carbapenemases, which destroy carbapenem antibiotics and other antibiotics such as penicillins and cephalosporins.

Carbapenem antibiotics are used to treat complicated infections often when other antibiotic treatment has failed and are often used as a last resort.

Why is carbapenem resistance a concern?

The spread of CPE bacteria to patients can cause serious problems. Unfortunately some strains of CPE are resistant to **all** known antibiotics and infections caused by these bacteria are untreatable with high mortality rates.

How do CPE spread?

- They can be passed to other patients by direct contact on hands or through contaminated surfaces or equipment. They can then be transferred into wounds or other body entry sites.
- CPE is common in some hospitals, both in the UK and abroad. Patients who have been in these hospitals may have picked up CPE from other patients, staff, equipment or the environment.

Risk Factors for CPE

Patients are at an increased risk of being colonised or infected if they have a history of:

- hospitalisation abroad, including cosmetic or elective surgery
- hospitalisation in a UK hospital with a high prevalence of CPE
- previously confirmed as a case or contact of a case.

Faecal screening, e.g., rectal swabs or stool samples, has been implemented nationally in hospitals in the UK on high risk patients, resulting in an number of sporadic cases.

Screening is not routinely required in a community setting.

Management of a CPE patient in GP Practice

- Most people with CPE are colonised and do not require antibiotics. The duration of colonisation is unknown; it may be anything from a few days to indefinitely.
- Prudent antibiotic prescribing, particularly broad spectrum agents, as they can increase the risk of acquiring CPE and causing infection in carriers.
- If a patient has clinical indications of an infection, treatment should be discussed with your local Consultant Microbiologist.
- Decolonisation of the skin or gut is not recommended.
- Always use standard precautions, including hand hygiene, before and after dealing with the patient.
- Patients attending for a wound dressing, where possible, should be scheduled at the end of the session to allow for environmental cleaning and disinfection.
- PPE should be worn, e.g., disposable apron and gloves, if there is a risk that clothing or uniform may be exposed to blood or body fluids.
- Long sleeved fluid repellent gowns should be worn if there is a risk of extensive splashing, e.g., colostomy.
- The immediate environment, e.g., couch, work surfaces, should be decontaminated with detergent wipes followed by disinfection with a chlorine-based disinfectant at 1,000 ppm.
- The CPE status should be noted in their records and communicated to any receiving healthcare provider.

Advice for patients in their own home

- No special measures are required.
- Patients should carry on as normal.
- After using the toilet, hands should be washed with liquid soap and warm water and use a separate towel from other people.

Further information:

- Contact your local Community Infection Prevention and Control Team of Public Health England.
- Public Health England 2015, Toolkit for managing Carbapenemase-producing Enterobacteriaceae in nonacute and community settings.
- Contact us on 01423 557340 for a patient leaflet.

If you require IPC education as part of your annual update or evidence for CQC compliance, visit our innovative website for health and social care providers and see our highly acclaimed Preventing Infection Workbooks for GP Practice.

www.infectionpreventioncontrol.co.uk