



# Patient Safety Alert

## Stage Two: Resources

### Addressing rising trends and outbreaks in carbapenemase-producing Enterobacteriaceae

6<sup>th</sup> March 2014

Alert reference number: NHS/PSA/Re/2014/004

Alert stage: Two - Resources

Enterobacteriaceae are a large family of bacteria that usually live harmlessly in the gut of all humans and animals, but, in the wrong place, can cause serious infections. Worldwide, a small but increasing number of strains of enterobacteriaceae have become resistant to carbapenem antibiotics, which have been defined by WHO as critically important antibiotics. Carbapenemases are enzymes made by some strains of these bacteria, which allow them to destroy carbapenem antibiotics and cause resistance. Increasing trends in sporadic infections, clusters and outbreaks of carbapenemase-producing Enterobacteriaceae (CPE) have been observed in a number of NHS trusts in England. There is a high risk of this problem becoming more widespread unless early and decisive action is taken by Trusts. These bacteria represent a significant challenge in terms of prevention, treatment and control. Inadequate measures to prevent and control transmission can have serious consequences for both patients, who may require more complex treatment to manage their infection, and hospitals in terms of ward closures and protracted patient stays. As a result of the escalating problem, Public Health England (PHE) is providing national support for ongoing efforts to control and reverse rising trends with the aim of minimising morbidity and preventing further outbreaks. Because the PHE resources are now available NHS England has been able to proceed to issuing a Stage 2 alert without a previous Stage 1 alert.

PHE have recently published a toolkit for acute trusts to assist them with the early detection, management and control of carbapenemase-producing Enterobacteriaceae. A key aspect of the control measures is to take special precautions for patients recently treated in countries known to have high levels of CPE or in UK hospitals with recent clusters or outbreaks of CPE.

This alert is to bring this significant infection prevention and control challenge to the attention of the NHS and to signpost the toolkit developed to support the NHS in both controlling existing transmission problems and preventing further spread.

The toolkit along with 'UK Standards for Microbiology Investigations: Laboratory Detection and Reporting of Bacteria with Carbapenem-Hydrolysing  $\beta$ -lactamases (Carbapenemases)' can be found at: [www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb\\_C/1317140378529](http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1317140378529)

BSAC antibiotic susceptibility testing guidance is available at: [www.bsac.org.uk/wp-content/uploads/2012/02/AST-testing-and-Reporting-guidance-v1-Final.pdf](http://www.bsac.org.uk/wp-content/uploads/2012/02/AST-testing-and-Reporting-guidance-v1-Final.pdf)

Implementation advice on the toolkit can be obtained from local PHE Centres: [www.gov.uk/government/publications/phe-centre-addresses-and-phone-numbers/phe-local-and-regional-contact-details](http://www.gov.uk/government/publications/phe-centre-addresses-and-phone-numbers/phe-local-and-regional-contact-details)

## Actions

**Who:** Chief Executives of NHS trusts and foundation trusts providing acute care and independent hospitals.

**When:** To commence immediately and completed by 30 June 2014



Bring this alert to the notice of the Director for Infection Prevention and Control (DIPC) and infection control staff to instigate the development of the board level CPE management plan.



In discussion with relevant clinical experts establish if there are / have been cases of CPE in the organisation and consider if immediate action is required locally to reduce the risk of such an incident / outbreak occurring.



In the light of the local situation the Infection Prevention and Control Committee to plan for local adoption and dissemination of the Acute Trust CPE toolkit to influence clinical practice. This will include advising front line staff of the issue and the Trust's plans for addressing CPE.

**Note:** This alert is being sent to GPs for information



---

Alert reference number: NHS/PSA/Re/2014/004

---

Alert stage: Two - Resources

---

### Technical notes

#### **Stakeholder engagement**

This Patient Safety Alert was circulated to the NHS England Medical Patient Safety Expert Group (see [www.england.nhs.uk/patientsafety](http://www.england.nhs.uk/patientsafety) for membership details) who fully supported the publication of this Alert.