



Toolkit for Managing Carbapenemase-producing Enterobacteriaceae in Non-acute and Community Settings

Annex G: Primary Care Quick Reference Guide

What are Carbapenemase-producing Enterobacteriaceae?

- Carbapenemases are enzymes e.g. KPC, OXA-48, NDM and VIM, that destroy carbapenem antibiotics (conferring resistance) made by a small but growing number of Enterobacteriaceae strains.
- Enterobacteriaceae (including *Escherichia coli*, *Klebsiella* spp. and *Enterobacter* spp.) usually colonise the gut of humans and animals
- They are also some of the most common causes of opportunistic urinary tract infections, intra-abdominal and bloodstream infections.
- Carbapenems, including meropenem, ertapenem, imipenem and doripenem, are normally reserved for serious infections caused by drug-resistant Gram-negative bacteria.
- Colonisation is more common than infection; duration of colonisation is unclear

High risk groups i.e. at increased risk of being colonised

- Those with history of:
 - hospitalisation abroad, particularly having received intensive care or undergone invasive treatment such as haemodialysis
 - hospitalisation in UK hospital with high prevalence of carbapenemase-producing Enterobacteriaceae
 - being previously confirmed as a case or contact of a case
 - being a health tourist

What is required from primary care?

- On receipt of positive result - inform and advise individual (and/or family as appropriate) and care setting
- Contact PHE Centre to undertake risk assessment in relation to source and prevention of transmission
- Management of infection (see below if colonised only) under advice of microbiologist; referral for management of severe infections
- Communication of status to any receiving healthcare providers

Screening and early detection (only if requested)	Not routinely used in community; if required - rectal swab by competent practitioner (stool sample second choice); swabs from wounds and device-related sites may provide additional information if requested
Decolonisation	Neither skin nor gut decolonisation are recommended
Treatment of infection	Speak to microbiologist – according to susceptibility result; combination therapy recommended for severe infections – hospitalisation required
Infection prevention and control	Generally standard precautions; where infection exists refer to care matrix (Toolkit section 2.0) for recommended measures
Communication	Robust interhealthcare communications to inform care setting to which patient is being transferred/discharged of their status – whether colonisation or infection
References	<ul style="list-style-type: none"> • PHE: Toolkit for Managing Carbapenemase-producing Enterobacteriaceae in Non-acute and Community Settings • PHE: Carbapenemase-producing Enterobacteriaceae: early detection, management and control toolkit for acute trusts available at https://www.gov.uk/government/publications/carbapenemase-producing-enterobacteriaceae-early-detection-management-and-control-toolkit-for-acute-trusts • USA Centres for Disease Control and Prevention: Guidance for Control of Carbapenem-resistant Enterobacteriaceae (CRE, 2012) available at http://www.cdc.gov/hai/organisms/cre/cre-toolkit/ • Department of Health: Prevention and control of infection in care homes – an information resource available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/214929/Care-home-resource-18-February-2013.pdf