



Prevention, Recognition, and Management of Carbapenem-Resistant Enterobacteriaceae in Long Term Care Facilities Infection Control Checklist

PDPH Case Definition

Carbapenem-Resistant *Enterobacteriaceae* (CRE) are defined as *Enterobacteriaceae* that are:

- **Nonsusceptible** to one of the following carbapenems: doripenem, meropenem, or imipenem AND
- **Resistant** to all of the following third-generation cephalosporins that were tested: ceftriaxone, cefotaxime, and ceftazidime
(Note: All three of these antimicrobials are recommended as part of the primary or secondary susceptibility panels for *Enterobacteriaceae*)

Klebsiella species and *Escherichia coli* that meet the CRE definition are a priority for detection and containment in all settings; however, other *Enterobacteriaceae* (e.g., *Enterobacter species*) may also be reported.

Cluster Definition

Two or more residents who acquire CRE during overlapping time spent within the same unit.

Reporting a Cluster

Any cluster should be promptly reported to the Philadelphia Department of Public Health (PDPH) by calling 215-685-6742 or faxing a report form to 215-238-6947. Single cases may also be reported.

Cluster Checklist*

- Notify appropriate personnel (i.e., clinical staff, infection prevention staff).
- Review prescribed antibiotic treatment for CRE positive residents with infections to determine if appropriate. Colonized patients should not be treated.
- Place residents with CRE on contact precautions in single room if available. Preference for single rooms should be given to residents at highest risk for transmission, such as those with incontinence, medical devices, or wounds with uncontrolled drainage. Contact precautions may be modified for colonized residents with some independence and mobility.
- Cohort residents with CRE if single rooms are not available.
- Cohort staff to affected unit(s) or rooms if possible.
- Reinforce hand hygiene and use of contact precautions on affected ward/unit. Consider audits to ensure compliance.
- Conduct an in-service to educate all staff (including housekeeping and non-direct care staff) about significance of CRE and proper precautions to prevent transmission.
- Minimize use of invasive devices.
- Bathe high-risk residents (e.g., incontinent of stool or ventilator-dependent) with 2% chlorhexidine.
- Screen epidemiologically-linked contacts (e.g., roommates) for CRE with at least stool, rectal, or perianal cultures and/or consider point prevalence survey of entire affected unit. Consider preemptive contact precautions of these residents pending results of screening cultures. Staff should not be screened.
- Ensure that precautions are continued if resident is transferred within the facility.
- An inter-facility transfer form should be completed whenever a resident is being transferred to another facility. This should indicate the CRE status of the resident and the presence of open wounds, indwelling devices, and antimicrobial usage. Communicate with transfer facility if resident is transferred from unit known to have a cluster of CRE, regardless of the resident's CRE status.

*Adapted from the Center for Disease Control and Prevention 2012 CRE Toolkit