



MLS Laboratory Update Newly Described Resistance Mechanism in Enterobacteriaceae June 28, 2010

Purpose of this Message

To inform MLS Laboratories about a newly described resistance mechanism found in species of *Enterobacteriaceae* that is associated with receipt of medical care in India or Pakistan.

Background

Since January 2010, CDC has identified three *Enterobacteriaceae* isolates carrying a newly described resistance mechanism, New Delhi metallo-beta-lactamase (NDM-1). Carriage of these organisms is closely linked to recent receipt of medical care in India or Pakistan. See the recent Morbidity and Mortality Weekly Report (MMWR) at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5924a5.htm?s_cid=mm5924a5_x

Clinicians should:

- Call MDH Acute Disease Investigation & Control if treating a patient that has had medical care in India or Pakistan within the past 6 months and is infected with a carbapenem-resistant *Enterobacteriaceae* (CRE).
- Implement contact precautions as recommended for CRE, found at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5810a4.htm>

Note: Laboratory identification of NDM-1 is not necessary to guide treatment or infection prevention practices, but is useful for epidemiologic and surveillance purposes.

Laboratories should call and submit isolates to MDH-PHL that fit ALL of the following criteria:

- Carbapenem-resistant *Enterobacteriaceae* (CRE) – [implicated species identified to date include *E. cloacae*, *K. pneumoniae*, and *E. coli*],
- Modified Hodge Test (MHT) positive, and
- PCR negative for *bla*_{KPC}.

MDH will forward these isolates to CDC for further characterization.

MDH continues to request that laboratories submit any CRE isolates that are Modified Hodge Test positive for further laboratory characterization and epidemiologic response.

Thank you for your attention to this important infection control issue.

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****Please forward this to all appropriate personnel within your institution and Health System****

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