

CRE Testing to Continue Indefinitely at MDCH Laboratory

Target audience: clinical laboratories

Thursday July 25, 2013

Background:

The Michigan Department of Community Health microbiology laboratory has been performing confirmatory testing for Carbapenem-Resistant *Enterobacteriaceae* (CRE) since January 2013. Testing includes confirmation of organism identification; minimum inhibitory concentration (MIC) by reference broth microdilution; Modified Hodge Test (MHT); and Real-Time Polymerase Chain Reaction (RT-PCR) for resistance genes for KPC and NDM-1.

This testing was supported by the Association of Public Health Laboratories and by the Cooperative Agreement Number U60HM000803 from the Centers for Disease Control and Prevention and/or Assistant Secretary for Preparedness and Response. Although the federal funding officially ended June 30, MDCH will continue to perform this testing until further notice.

What laboratories need to know:

- When you detect possible carbapenem resistance in isolates of *Enterobacteriaceae*, (using current recommendations from CLSI) MDCH laboratory can perform confirmatory testing on these isolates.
- Submission of isolates is voluntary; however, the Michigan public health code does require the reporting of an “unusual occurrence or outbreak”. If your laboratory is encountering CRE for the first time, you should submit an isolate for testing, and report it to the local health department.
- Once a particular genus and species from your facility has been confirmed as CRE, there is little need to send additional isolates of that genus and species (unless from a different clinical site); but we encourage you to submit suspect isolates from other genera to measure the spread of CRE.
- Submit pure culture on a slant (BHI or TSA preferred); no agar plates will be accepted
- Please include **a copy of your ID and susceptibility results with carbapenem MICs** (e.g., printout from automated instrument)
- Also indicate the Modified Hodge Test result, if performed.
- Enter “CRE Confirmation” in “Other_____” space on MDCH requisition (Form DCH0583)
- Follow regulations for shipping Infectious Substances, category B (UN 3373) and transport to Lansing laboratory (lab courier, USPS, FedEx)
- Complete instructions are on the MDCH webpage www.michigan.gov/mdchlab under the link “What’s New”

The MDCH Bureau of Laboratories has received a grant to dev health laboratories for CRE and VRSA to provide confirmatory jurisdiction. A webinar was held on December 11, 2012 to dis laboratory role.

- [CRE Confirmatory Testing Criteria](#) - added 2/1/2013
- [CRE Lab Flow Chart](#) - added 2/1/2013
- [CRE Call Handout](#)
- [CRE Call Audio](#)

Questions and additional information:

- For laboratory related questions, please contact Dr. Jim Rudrik, Acting Director, Infectious Diseases Division RudrikJ@michigan.gov (517) 335-8067
- For epidemiology related questions, please contact the SHARP Unit, S.I.D.E. Section in the Bureau of Epidemiology at (517) 335-8165