CRE Reporting in Maryland: Frequently Asked Questions

1. What is the definition of CRE to be reported?

Any Enterobacteriaceae isolated from any body site that is **resistant** to any carbapenem (MIC>=2 for ertapenem, or MIC>=4 for doripenem, imipenem or meropenem) should be reported. Any Enterobacteriaceae from any body site that tests positive for carbapenemase production (via MHT, PCR, Carba-NP, MBL screen, etc.) should also be reported, even if it does not have a resistant MIC for a carbapenem. It is not necessary to report organisms intrinsically resistant to Imipenem if they only test resistant to Imipenem.

2. Why did DHMH revise the definition in 2015?

Maryland DHMH revised its surveillance definition for CRE to one which 1) aligns with the CRE definition in the CDC's National Healthcare Safety Network (NHSN) and 2) will better capture most carbapenemase-producing organisms without producing too many false-positives.

(Note: the NHSN definition specifies which species are to be reported, while the Maryland definition still requires all species of Enterobacteriaceae to be reported).

3. How does this CRE definition differ from the MuGSI CRE definition?

For those labs in Baltimore City, Baltimore County, Carroll County, and Howard County participating in CDC's MuGSI surveillance, the statewide reportable definition is still different. MuGSI includes a specific set of organisms (including A. baumannii), sterile body sites and urine only, and is based only on doripenem, imipenem and meropenem (I or R by most recent CLSI guidelines).

4. What form(s) do I fill out to report the case?

To report the CRE, please fill out the CRE case report form:

http://phpa.dhmh.maryland.gov/IDEHASharedDocuments/CRE%20Case%20Report%20Form%20(Rev.%20Jan%202015).pdf

It is acceptable to complete all information directly on the form, or use the form for patient information only and include a print-out from your automated testing instrument with organism and susceptibilities.

5. How exactly do I fill it out?

Some potentially confusing fields are explained below:

- Processing laboratory- Name of your hospital or commercial laboratory (where the report is coming from.)
- Requesting facility- Name of facility for whom you are performing the culture. Will be blank unless you
 are performing the culture for another facility (an affiliated hospital, long term care facility, etc.)
- Requesting physician- Name of outpatient physician(s) for whom you are performing the culture. Will be blank unless you are performing the culture for an outpatient setting or physician's office.
- Automated Testing Instrument and/or Kirby Bauer susceptibilities- please include both the MIC value (or zone diameter) and the interpretation based on the breakpoints used by your lab.
- PCR- If positive, please write what genetic element the isolate tested positive for.

6. Do I still need to report MICs for the third-generation cephalosporins now that the case definition does not consider them?

Yes, please continue to report them whenever possible, as DHMH would like to assess how the revised definition compares to the original 2013 definition in capturing carbapenemase-producing organisms.

7. Where do I fax it?

Fax the completed CRE case report form to 410-669-4215.

8. What form do I fill out for submitting an isolate?

If you require testing results from the DHMH lab to be reported back to your lab, you must fill out form 4676: http://dhmh.maryland.gov/laboratories/docs/Infectious%20Agents%20Lab%20Slip%20(DHMH%204676%20Revised%2004-12).pdf

If you are submitting the isolate for surveillance compliance purposes only, you do not need to fill out form 4676, simply include a copy of the CRE case report form with your shipment.

9. Do I need to report multiple cultures for the same patient?

Yes, please report every CRE positive culture regardless of prior cultures for that patient.

10. Do I need to submit multiple isolates for the same patient?

At this time, we are asking that you submit repeat isolates if they are isolated from a different body site, or if more than 7 days has elapsed since the last reported positive culture from the patient.

11. Do I need to report CRE isolated from non-Maryland residents in my hospital?

Yes, please report any CRE meeting our definition that is isolated in your lab.

12. What is DHMH doing with the isolates?

The DHMH Public Health Laboratory is working to further characterize banked isolates in conjunction with the Office of Infectious Disease Epidemiology and Outbreak Response. Further testing of isolates for other purposes, like outbreak investigations, might also be done by DHMH.

13. My guestion is not covered here. Who can I contact?

If your question is about the CRE definition, MuGSI surveillance or how to report cases, please email or call Elisabeth Vaeth at elisabeth.vaeth@maryland.gov or 410-767-9843.

If your question relates to testing or submission of isolates, please email Dr. Jafar Razeq at <u>jafar.razeq@maryland.gov</u>.