

Guidance for Veterinary Microbiology Labs for Reporting Results with Carbapenem-Resistant *Enterobacteriaceae* (CRE)

Rationale: To emphasize the significance of isolation of CRE from veterinary microbiology laboratories results should be reported **timely, obviously and accurately. document if the organism was reported to officials.** Microbiologists should also be prepared **to guide clients to useful resources.**

	Recommendation
Timely Reporting	All reasonable efforts should be made to report CRE to submitting clinicians as soon as possible. Given the unique nature of these isolates, follow-up with clinician should be attempted by the overseeing microbiologist within 48 hours of reporting to highlight the significant result.
Obvious Reporting	<p>Isolate identification should include the phrase “carbapenem-resistant” if possible within LIMS. Alternatively a comment included. Ideally both could be included. This should be done for all Enterobacteriales except for <i>Proteus</i>, <i>Morganella</i> and <i>Providencia</i> if imipenem is tested (since resistant phenotype is common in these organisms due to poor affinity penicillin-binding proteins). This could also be considered for <i>Pseudomonas aeruginosa</i> and <i>Acinetobacter baumannii</i>.</p> <p>Identification Example: “Carbapenem-resistant <i>Escherichia coli</i>” Comment Example: “There are few reports of CRE in companion animals. In human medicine, these organisms have significant requirements for infection control and important public health implications. Veterinary hospitals and clinics may need to address similar infection control and patient/staff safety measures as their human counterparts.”</p>
Accurate Reporting	<p>Preliminary or final results should reflect the accurate state of testing results. It is recommended that all laboratories be able to confirm carbapenemase production by the modified Carbapenem Inactivation Method (mCIM) or other test. If genotypic confirmation is not required from public health, Vet-LIRN should be considered as a possible resource for advanced testing.</p> <p>Examples of comments: “Isolate has an MIC of >4 ug/mL for imipenem; carbapenemase phenotypically detected (mCIM positive); awaiting genotypic characterization.”</p>
Public Health Reporting	<p>Document if organism has been reported to public health officials in final report.</p> <p>Example comment: “Isolation of this organism has been reported to the Philadelphia Department of Health in accordance with local requirements. Consultation with infection control experts is recommended”</p>

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