

Louisiana Office of Public Health Laboratories	
Test Name	Carbapenem Resistant Enterobacteriaceae (CRE) or <i>Pseudomonas aeruginosa</i> (CRPA) Confirmation and Molecular Characterization
PHL Location	Central Laboratory
CPT Code	87556, 87077, 87046
Synonyms	N/A
Brief Description of Test	Identification Confirmation, Antimicrobial Susceptibility Testing, Phenotypic Carbapenemase Confirmation, and Molecular Characterization of Suspected CRE/CRPA Isolates
Possible Results	Organism Identification, Antimicrobial Susceptibility Results (S, I, R), Phenotypic Confirmation Results (Positive or Negative), and Molecular Characterization (Detection of KPC, NDM, VIM, OXA-48, or IMP Gene Sequences)
Reference Range	N/A
Specimen Type	Pure viable isolate of one of the following organisms from any source: <ol style="list-style-type: none"> <i>Escherichia coli</i>, <i>Klebsiella oxytoca</i>, <i>Klebsiella pneumoniae</i>, and <i>Enterobacter spp.</i> that are resistant to imipenem, meropenem, doripenem, or ertapenem by standard susceptibility testing methods (i.e., minimum inhibitory concentrations of ≥ 4 $\mu\text{g/mL}$ for doripenem, imipenem or meropenem or ≥ 2 $\mu\text{g/mL}$ for ertapenem). Non-mucoid <i>Pseudomonas aeruginosa</i> isolates that are resistant to imipenem, meropenem, or doripenem by standard susceptibility testing methods (i.e., minimum inhibitory concentrations of ≥ 8 $\mu\text{g/mL}$).
Specimen Container(s):	See storage and transport instructions. Specimens must be labeled with two patient identifiers which match the identifiers on the lab submission form.
Minimum volume accepted:	N/A
Collection Instructions	N/A
Storage and Transport Instructions	Specimens can be maintained at ambient temperatures or refrigerated temperatures (2°C to 37°C) to protect viability. Do not freeze or ship frozen. The specimen should be received in the State Lab as soon as possible after the original collection date to allow for prompt epidemiological investigation.
Causes for Rejection	<ul style="list-style-type: none"> Leaking or broken container. The Lab form 93 is missing required information. No Lab form 93 received with specimen. Mislabeled or Unlabeled specimen.

Limitations of the Procedure	Isolate submitted should be pure and viable.
Interfering Substances	N/A
References	<ol style="list-style-type: none"> 1. Guidance for Implementation of CRE and CRPA Testing in State and Local Public Health Labs. CDC Antimicrobial Resistance Laboratory Network. September 2018. 2. Clinical Microbiology Procedures Handbook. ASM Press 2016. 3. CLSI Performance Standards for Antimicrobial Susceptibility Testing. M100. 2017. 4. CLSI Performance Standards for Antimicrobial Disk Susceptibility Tests. M02. 2015. 5. Xpert® Carba-R Assay Package Insert. Cepheid, May 2016.
Additional Information	<p>Use Lab Form 93 and supply the following information:</p> <ul style="list-style-type: none"> • Patient’s first and last name • Second Unique Identifier • Gender • Date of birth • Date specimen was collected • Source of specimen • Test requested • Identification of organism obtained by submitter • Submitter’s name, address, telephone number, fax number and contact person.
Release Date	2/8/2019
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