

SURVEY QUESTIONS FOR LABORATORIANS

VA QUERI CARRIAGE II Program Survey of laboratory practices of Carbapenemase-producing and Carbapenem-resistant *Acinetobacter baumannii* and *Pseudomonas aeruginosa*

This survey is focused on understanding laboratory practices related to carbapenemase-producing and carbapenem-resistant *Acinetobacter baumannii* and *Pseudomonas aeruginosa* in your facility. You are being asked to participate because of your role in laboratory surveillance. We encourage you to seek input as needed from other staff for questions you are unfamiliar or unable to answer. This survey is voluntary, and responses will be kept confidential. Identifiers will not be shared outside the CARRIAGE II team. The survey should take 5-10 minutes to complete.

1. VISN number:

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2. Facility and station number (If you are not sure what your station number is, you may look it up here: https://www.va.gov/directory/guide/rpt_fac_list.cfm):

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4. What antimicrobial susceptibility testing methods does your lab use as a primary first step to identify a Carbapenem-resistant *A. baumannii* or *P. aeruginosa*? Please select the primary test used for each organism. (check all that apply)

	A. baumannii	P. aeruginosa
E-test	<input type="checkbox"/>	<input type="checkbox"/>
Automated MIC/Broth	<input type="checkbox"/>	<input type="checkbox"/>
Kirby Bauer Test	<input type="checkbox"/>	<input type="checkbox"/>
Disk Diffusion	<input type="checkbox"/>	<input type="checkbox"/>
Manual Broth microdilution	<input type="checkbox"/>	<input type="checkbox"/>
Don't know	<input type="checkbox"/>	<input type="checkbox"/>
Testing is done off-site	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

Please specify (*A. baumannii*): _____

Please specify (*P. aeruginosa*): _____

5. If your primary step suggests a Carbapenem-resistant *Acinetobacter baumannii* or *Pseudomonas aeruginosa*, what method does your laboratory use to confirm the initial susceptibility testing? (check all that apply)

	A. baumannii	P. aeruginosa
Repeat first test	<input type="checkbox"/>	<input type="checkbox"/>
Automated MIC/Broth	<input type="checkbox"/>	<input type="checkbox"/>
Kirby Bauer Test	<input type="checkbox"/>	<input type="checkbox"/>
Disk Diffusion	<input type="checkbox"/>	<input type="checkbox"/>
Manual Broth microdilution	<input type="checkbox"/>	<input type="checkbox"/>
Don't know	<input type="checkbox"/>	<input type="checkbox"/>
We don't do a second round of susceptibility testing for this organism(s)	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

Please specify (*A. baumannii*): _____

Please specify (*P. aeruginosa*): _____

6. If the results of carbapenem susceptibility testing for *A. baumannii* or *P. aeruginosa* suggest a possible carbapenemase-producing *Acinetobacter baumannii* or carbapenemase-producing *Pseudomonas aeruginosa*, which method(s) does your lab or your reference lab use to confirm that the *Acinetobacter baumannii* or *Pseudomonas aeruginosa* isolate produces a carbapenemase? (check all that apply)

	A. baumannii	P. aeruginosa
Modified Hodge Test (MHT)	<input type="checkbox"/>	<input type="checkbox"/>
Modified carbapenem inactivation method (mCIM)	<input type="checkbox"/>	<input type="checkbox"/>
CarbaNP	<input type="checkbox"/>	<input type="checkbox"/>
Carba-R	<input type="checkbox"/>	<input type="checkbox"/>
Other PCR detection from the initial culture (please specify which genes are detected between a-f)	<input type="checkbox"/>	<input type="checkbox"/>
a. KPC	<input type="checkbox"/>	<input type="checkbox"/>
b. NDM	<input type="checkbox"/>	<input type="checkbox"/>
c. IMP	<input type="checkbox"/>	<input type="checkbox"/>
d. VIM	<input type="checkbox"/>	<input type="checkbox"/>
e. OXA-48	<input type="checkbox"/>	<input type="checkbox"/>
f. Other OXA genes	<input type="checkbox"/>	<input type="checkbox"/>
Performed in reference lab or another VA and unsure of method used	<input type="checkbox"/>	<input type="checkbox"/>
Don't know	<input type="checkbox"/>	<input type="checkbox"/>
We don't perform or send carbapenemase testing for this organism(s)	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

Please specify here (*A. baumannii*): _____

Please specify here (*P. aeruginosa*): _____

6a. Where is the confirmatory testing performed? (Check all that apply)

	A. baumannii	P. aeruginosa
On site/In house	<input type="checkbox"/>	<input type="checkbox"/>
Commercial Reference Laboratory (e.g., Quest, LabCorp, etc)	<input type="checkbox"/>	<input type="checkbox"/>

Public Reference Laboratory (e.g., public health department, CDC Antimicrobial Resistance Laboratory Network lab)	<input type="checkbox"/>	<input type="checkbox"/>
University Affiliate Laboratory	<input type="checkbox"/>	<input type="checkbox"/>
Another VA Medical Center lab	<input type="checkbox"/>	<input type="checkbox"/>
Don't know	<input type="checkbox"/>	<input type="checkbox"/>
Not applicable-No confirmatory testing is done.	<input type="checkbox"/>	<input type="checkbox"/>

7. If your lab tests for carbapenemase production for Acinetobacter baumannii and/or Pseudomonas aeruginosa, do you amend the carbapenem susceptibility interpretations in any way if a carbapenemase is detected?

	Yes	No	Don't know	Not Applicable
A. baumannii	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
P. aeruginosa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. If your lab tests for carbapenemase production for Acinetobacter baumannii and/or Pseudomonas aeruginosa, do you amend the beta-lactam susceptibility interpretations in any way if a carbapenemase is detected?

	Yes	No	Don't know	Not Applicable
A. baumannii	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
P. aeruginosa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. If your lab identifies a carbapenemase-producing Acinetobacter baumannii or carbapenemase-producing Pseudomonas aeruginosa, does your lab (or reference lab) perform antibiotic susceptibility testing on any additional agents per lab protocol?

	Yes	No	Don't know	Not Applicable
A. baumannii	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
P. aeruginosa	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9a. If your lab (or reference lab) performs additional antibiotic susceptibility testing for carbapenemase-producing Acinetobacter baumannii or carbapenemase-producing Pseudomonas aeruginosa, which of the following antibiotics does your lab subsequently report per lab protocol? (check all that apply)

	A. baumannii	P. aeruginosa
Tobramycin	<input type="checkbox"/>	<input type="checkbox"/>
Amikacin	<input type="checkbox"/>	<input type="checkbox"/>
Polymyxin B	<input type="checkbox"/>	<input type="checkbox"/>

Colistin	<input type="checkbox"/>	<input type="checkbox"/>
Tigecycline	<input type="checkbox"/>	<input type="checkbox"/>
Ceftazidime-avibactam	<input type="checkbox"/>	<input type="checkbox"/>
Ceftolozane-tazobactam	<input type="checkbox"/>	<input type="checkbox"/>
Meropenem-vaborbactam	<input type="checkbox"/>	<input type="checkbox"/>
Imipenem-relebactam	<input type="checkbox"/>	<input type="checkbox"/>
Aztreonam-avibactam	<input type="checkbox"/>	<input type="checkbox"/>
Cefiderocol	<input type="checkbox"/>	<input type="checkbox"/>
N/A	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

Please specify here (A. baumannii): _____

Please specify here (P. aeruginosa): _____

10. Please note the extent to which you agree or disagree with the following statements related to the detection and confirmation of carbapenemase-producing Acinetobacter baumannii or carbapenemase-producing Pseudomonas aeruginosa:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Don't know/Unable to Assess
a. The local leadership at my facility provides, or would provide (if available), the resources that are needed to support detection and confirmation of these organisms in house or as send-out testing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. We have the staffing resources we need to accomplish the activities related to detection and confirmation of these organisms in house or as send-out testing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. We have the laboratory/equipment resources to accomplish the activities related to detection and confirmation of these organisms in house	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. What is your professional title/position? (check all that apply)

- Laboratory Technologist (non-Supervisory)
- Lead Laboratory Technologist
- Supervisory Laboratory Technologist
- Microbiology Laboratory Director
- CLIA Laboratory Director
- Other

Please specify:

12. How long have you been at this facility? (choose one)

- < 1 year
- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21+ years