

Title

ARLN AR/HAI Alert Findings and Reporting for Public Health Laboratories

Purpose

As part of the Antibiotic Resistance (AR) Regional Lab Network activities, state and local public health laboratories will conduct antimicrobial susceptibility testing and molecular assays for resistance mechanisms on a number of organisms recognized as important antibiotic resistance threats. For some findings, state and local HAI coordinators and CDC should be notified immediately so that appropriate infection control measures may be implemented. The table below summarizes the AR findings that should trigger these email alerts.

Contact Information

Alerts should be sent to:

Your jurisdictional HAI epi program [HAI COORDINATOR/DESIGNEE NAME] at [email address]

and

CDC AR/HAI staff at ARLN_alert@cdc.gov

Please include: State Lab ID of isolate(s); specimen source; description of testing completed and results of those tests; and age of patient(s) (not DOB)

Alert Type	State Lab ID	Specimen Source	Patient Age (yrs)	Description of testing completed and results

Alert Type	Findings	Organism
Pan-resistance	Non-susceptible to all drugs tested by the submitting clinical laboratory	Any
<i>mcr</i> -type resistance	Detection of <i>mcr</i> -1 or <i>mcr</i> -2 gene by PCR or WGS	Any
Novel carbapenemase suspected	Tests positive for carbapenemase production but PCR-negative	Enterobacteriaceae ¹ , <i>Pseudomonas aeruginosa</i> , <i>Acinetobacter</i>
Non-KPC carbapenemase in Enterobacteriaceae	non-KPC carbapenemase in Enterobacteriaceae	Enterobacteriaceae ¹
Carbapenemase-producing non-fermenter	Tests positive for carbapenemase production	<i>Pseudomonas aeruginosa</i> ; <i>Acinetobacter</i>

¹ Disregard *Serratia spp.* resistant to carbapenems and susceptible to 3rd generation cephalosporins. This resistance profile indicates an SME gene, not novel resistance.