

January 13, 2022

Dear Laboratory Partner,

The West Virginia Department of Health and Human Resources, Bureau for Public Health would like to ensure you are aware of a Centers for Disease Control and Prevention (CDC) funded effort to combat antimicrobial resistance (AR). In the fall of 2016, CDC launched the Antibiotic Resistance Laboratory Network (ARLN). The ARLN is a comprehensive laboratory capacity network consisting of the CDC, seven regional laboratories, a National Tuberculosis Molecular Surveillance Center, state public health laboratories, hospital and other healthcare facility laboratories all working together to improve testing capacity for antimicrobial-resistant, difficult to treat pathogens such as carbapenem-resistant Enterobacteriales (CRE), *Pseudomonas aeruginosa* (CRPA), and *Acinetobacter baumannii* (CRAB); *Candida* species including *C. auris*; *Neisseria gonorrhoeae*; *Streptococcus pneumoniae*; and other pathogens associated with healthcare-associated infections.

The Bureau for Public Health's Office of Laboratory Services is requesting your participation in the ARLN network by submitting CRE, CRPA, and CRAB bacterial isolates to our facility for further testing of carbapenemase production and detection of the mechanism of resistance. We will perform four tests including: MALDI-TOF to confirm the identification of the bacterial isolate, antibiotic susceptibility testing using Etest® strips against a panel of antibiotics, modified carbapenem inactivation method (mCIM) testing to detect production of a carbapenemase, and Xpert® Carba-R testing for genes causing resistance. A report with these results will be provided back to the submitting facility via fax within 2 working days. The isolates we are requesting include:

Carbapenem resistant Enterobacteriales (CRE):

Bacterial isolates, including *Escherichia coli*, *Klebsiella oxytoca*, *Klebsiella pneumoniae*, and *Enterobacter* spp., *Providencia* spp., *Proteus* spp., *Morganella* spp., *Citrobacter* spp., and *Serratia* spp., resistant to **at least one** carbapenem antibiotic (imipenem, meropenem, doripenem, or ertapenem) or produce a carbapenemase. The resistant minimum inhibitory concentrations (MICs) for the carbapenems are as follows: MIC of ≥ 4 $\mu\text{g/mL}$ for doripenem, imipenem, or meropenem or ≥ 2 $\mu\text{g/mL}$ for ertapenem.

Carbapenem resistant Pseudomonas aeruginosa (CRPA):

P. aeruginosa isolates resistant to **at least one** carbapenem antibiotic (imipenem, meropenem, or doripenem; MIC of ≥ 8 $\mu\text{g/mL}$) **and nonsusceptible to cefepime or ceftazidime** (intermediate or resistant MIC of ≥ 16 $\mu\text{g/mL}$).

Carbapenem resistant Acinetobacter baumannii (CRAB):

A. baumannii isolates resistant to imipenem, meropenem, or doripenem (MIC of ≥ 8 $\mu\text{g/mL}$).

Note: CRAB isolates that are resistant to all antibiotics tested should be routinely submitted and tested at public health laboratories.

Using our ARLN-funded FedEx shipping account, isolates should be sent to the following address:

Office of Laboratory Services
ATTN: Lauren Bates and Lindsay Barr
167 11th Avenue
South Charleston, WV 25303
(304) 558-3530

If you would like to participate in this CDC effort, please contact our office at the numbers listed below and we will provide instructions on the use of the Office of Laboratory Services' ARLN-funded FedEx shipping account.

We hope that you will take advantage of this opportunity to share specimens and gather valuable data not only for your facility, but also for the nationwide effort to combat antimicrobial resistance and prevent healthcare-associated infections.

Sincerely,

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