

Date: July 29, 2019
To: Edmonton Zone: Physicians and Pharmacy Services
From: Alberta Public Laboratories (APL) - ProvLab
Re: Changes to Gram Negative Reporting Cascades

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Key Message:

- The Gram negative antimicrobial susceptibility testing cascades are changing at ProvLab (UAH Microbiology) to align with the Gram negative antimicrobial cascades that will be used in Connect Care.
- The key changes to reporting are listed below:
 - For urine culture isolates of ESBL-producing *Escherichia coli*, fosfomycin will now be reported.
 - For ESBL-producing organisms, reporting of β -lactams will be as follows:

Antibiotic	Reporting
Ampicillin	Resistant
Cefazolin (urine)	Resistant
Ceftriaxone	Resistant
Piperacillin/Tazobactam	Not reported
Amoxicillin/Clavulanate (urine)	Not reported
Ertapenem and Meropenem	Reported as tested
Imipenem	Reported when ertapenem and meropenem are resistant

- For inducible AmpC-producing organisms (i.e. SPICE), reporting of β -lactams will be as follows:

Antibiotic	Reporting
Ampicillin	Resistant
Cefazolin (urine)	Resistant
Ceftriaxone	Sterile Sites = Resistant Non-sterile Sites = Not reported
Piperacillin/Tazobactam	Susceptible = Not reported Resistant = Reported
Amoxicillin/clavulanate (urine)	Resistant
Ertapenem and Meropenem	Reported as tested
Imipenem	Reported when ertapenem and meropenem are resistant

A comment will be added to all SPICE organisms: "This organism can develop resistance to third-generation cephalosporins and piperacillin-tazobactam. Use of these agents is not recommended."

- For *Pseudomonas aeruginosa* and the non-Enterobacteriaceae, piperacillin will now be replaced with piperacillin/tazobactam in the antibiotic panel.
- Any requests to release susceptibility results for drugs not reported must be approved by the microbiologist-on-call (780-407-8822 or 780-407-6191).

Action Required:

- No action is required. The new cascades will be implemented on July 12, 2019.

Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:

- Dr. Graham Tipples, Medical-Scientific Director, Public Health, APL