Health PEI
One Island Health System

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Provincial Drugs & Therapeutics
Antimicrobial Stewardship Subcommittee

To:	PEI Physicians, Nurse Practitioners, Nurse Managers/Educators and Pharmacists
From:	Dr. Greg German, Medical Microbiologist Consultant, and Fiona Mitchell, chair of PD&T Antimicrobial Stewardship Subcommittee
Date:	April 20th 2022
Re:	**Updated** Health PEI Antibiogram 2022: Antibiotic Usage Practice Points

Antibiotic resistance is monitored in the community and our PEI hospitals yearly by an antibiogram - available on the Health PEI micro site and on the Firstline app.

Highlight of Practice Points

What we are doing well:

- Continue to use nitrofurantoin, fosfomycin, and sulfamethaxole-trimethorprim for female cystitis.
- Due to high rates of success with 1st line cystitis therapies, urine culture need not be sent, unless pregnant, for urologic procedure, or symptomatic AND: antibiotic failure, recent antibiotic use, complicated anatomy, or concern for a moderate to severe infection.
- Ciprofloxacin susceptibilities are stable with improvement noted for Pseudomonas (a key marker). Ciprofloxacin should be reserved for use when the prostate or kidney is likely infected.
- No carbapenem-resistant Enterobacterales (CRE) cases were identified on clinical/screening samples on PEI in a cross country single day survey, co-lead by Health PEI (German et al.)

What we need to improve on:

- Hydrate seniors and do not send urine cultures when there is only foul or cloudy urine. There is a national campaign through AMMI Canada with provider tools. #symptomfreepeeletitbe
- Enterococcus bacteriuria is common (especially if hardware or catheter present). If there are no leukocytes present in urinalysis then Enterococcus UTI is very unlikely.
- Avoid amoxicillin clavulanic acid for UTI routinely, as cefuroxime for cystitis, and cefixime for pyelonephritis are the preferred 4th line agents and can be provided according to our beta lactam matrix in those with even a severe Type-1 penicillin allergy.
- Do not use Macrolide monotherapy for community-acquired pneumonia (susceptibility rate for *Streptococcus pneumoniae* has dropped to 71%). Consider amoxicillin 1g po TID as per local CAP guidelines. Prior antibiotic use is a key question.
- Non-pseudomonal gram negative susceptibility in non-urine samples have worsened for several antibiotics, suggesting closer attention to length of therapy and rapid IV to PO step down is needed.
- Clindamycin susceptibilities have gone down for Group A and Group B streptococcus. Limit use of clindamycin wherever possible, also due to higher risk of Cdiff.

What we need to monitor:

- The % of MRSA compared to all *Staphylococcus aureus* infections has increased (7% to 12.5%) yet has decreased for bacteremia (7% to 1%), and shows a trend towards worsening in the ER wound swabs (7% to 10%).

For questions, please contact Fiona Mitchell (Provincial Antimicrobial Stewardship Pharmacist; 894-2587; fcmitchell@ihis.org). A special thank you goes out to Chris Norgaard, laboratory technologist at QEH, for compiling the 2022 Health PEI antibiogram.

PD&T Antimicrobial Stewardship Subcommittee
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