

Health PEI ANTIBIOGRAM 2025  
(Antibiotic Susceptibility Results of Non-Duplicative Isolates  
From All Community And Health Care Settings)

| URINE<br>Isolates             | Total Number | Nitrofurantoin* | Sulfamethoxazole<br>+ Trimethoprim | Fosfomycin~ | AmpIV/AmoxPO | Amox+Clav.Acid<br>(3 times a day) | Cefuroxime | Cefixime | Ciprofloxacin | Ceftazidime | Piperacillin+Tazo | Ertapenem | Meropenem | Tobramycin | Vancomycin IV |
|-------------------------------|--------------|-----------------|------------------------------------|-------------|--------------|-----------------------------------|------------|----------|---------------|-------------|-------------------|-----------|-----------|------------|---------------|
| <i>E. coli</i>                | 2651         | 99              | 86                                 | 99          | 65           | 86                                | 93         | 92       | 85^           | 95          | 95                | 100       | 100       | 94         |               |
| <i>Klebsiella pneumoniae</i>  | 483          | 60              | 94                                 |             |              | 91                                | 90         | 92       | 94            | 90          | 92                | 99        | 100       | 98         |               |
| <i>Klebsiella oxytoca</i>     | 114          | 97              | 97                                 |             |              | 95                                | 95         | 96       | 96            | 96          | 95                | 100       | 100       | 97         |               |
| <i>Enterobacter spp.</i> #    | 195          | 31              | 93                                 |             |              |                                   |            |          | 96            |             |                   | 92        | 100       | 98         |               |
| <i>Proteus mirabilis</i>      | 283          |                 | 90                                 |             | 89           | 96                                | 94         | 95       | 97            | 95          | 99                |           |           | 94         |               |
| <i>Pseudomonas aeruginosa</i> | 185          |                 |                                    |             |              |                                   |            |          | 97            | 94          | 95                |           | 95        | 98         |               |
| <i>Enterococcus faecalis</i>  | 416          | 99              |                                    | 93          | 100          | 100                               |            |          |               |             |                   |           |           |            | 100           |
| <i>Enterococcus faecium</i>   | 66           |                 |                                    |             |              |                                   |            |          |               |             |                   |           |           |            | 97            |

^E. coli and Cipro: ER (204) QEH 86%, (168) PCH 87%;  
# Includes *Klebsiella* (formally *Enterobacter*) *aerogenes*  
\*Nitrofurantoin activity limited to cystitis. Suitable for use with adequate renal function (CrCl ≥30 mL/min)  
~ Oral Fosfomycin use is mostly limited to the bladder (cystitis)  
Shaded boxes = Not routinely reported or recommended    Red Boxes = Predictably resistant

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| Gram Negative Isolates<br>(Excluding urines) | Total Number | AmpIV/AmoxPO | Amox+Clav.Acid<br>(3 times a day) | Cefuroxime | Cefixime | Sulfamethoxazole +<br>Trimethoprim | Ciprofloxacin | Cefazolin | Ceftriaxone | Ceftazidime | Ertapenem | Piperacillin+Tazo | Meropenem | Tobramycin |
|----------------------------------------------|--------------|--------------|-----------------------------------|------------|----------|------------------------------------|---------------|-----------|-------------|-------------|-----------|-------------------|-----------|------------|
| <i>E. coli</i>                               | 124          | 62           | 84                                | 87         | 91       | 94                                 | 83            | 90        | 90          | 90          | 100       | 90                | 100       | 94         |
| <i>Klebsiella</i> spp.                       | 67           |              | 96                                | 96         | 99       | 96                                 | 96            | 79        | 97          | 97          | 100       | 96                | 100       | 99         |
| <i>Enterobacter</i> spp.#                    | 45           |              |                                   |            |          | 96                                 | 98            |           |             |             | 98        |                   | 100       | 100        |
| <i>Serratia</i> spp.                         | 24           |              |                                   |            |          | 96                                 | 92            |           | 83          | 90          | 92        | 92                | 100       | 67'        |
| <i>Pseudomonas aeruginosa</i> ^              | 283          |              |                                   |            |          |                                    | 95            |           |             | 98          |           | 98                | 93        | 98         |

` For *Serratia* spp., Gentamycin (96% susceptible) is more effective than Tobramycin

# Includes *Klebsiella* (formally *Enterobacter*) *aerogenes*

*Haemophilus influenzae* beta-lactamase positive: (16 isolates) 22%

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^ Ceftolozane-Tazobactam available for *Pseudomonas aeruginosa* infections with restrictions. Contact Antimicrobial Stewardship pharmacist or Infectious Diseases for advice

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------|-----------------------------|--------------------|--------------|--------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------------------|--------------|-------------|---------------|
| Gram Positive Cocci                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Total Number | Penicillin (meningitis) | Penicillin (non-meningitis) | Penicillin~ (oral) | Ceftriaxone* | AmpIV/AmoxPO | Amox+Clav.Acid | Cefadroxil, Cephalixin, Cefazolin                                                                                                                                                      | Doxycycline (Tetracycline) | Sulfamethoxazole + Trimethoprim | Erythromycin | Clindamycin | Vancomycin IV |
| <i>Staphylococcus aureus</i> ^ (MSSA and MRSA)                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1259         |                         |                             |                    |              |              | 87             | 87                                                                                                                                                                                     | 96                         | 96                              | 74           | 79          | 100           |
| MSSA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1095         |                         |                             |                    |              |              | 100            | 100                                                                                                                                                                                    | 97                         | 98                              | 78           | 80          | 100           |
| MRSA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 164          |                         |                             |                    |              |              |                |                                                                                                                                                                                        | 84                         | 87                              | 49           | 72          | 100           |
| <i>Staphylococcus lugdunensis</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 79           |                         |                             |                    |              |              | 100            | 100                                                                                                                                                                                    | 99                         | 97                              | 99           | 97          | 100           |
| <i>Staphylococcus epidermidis</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 151          |                         |                             |                    |              |              | 45             | 45                                                                                                                                                                                     | 80                         | 77                              |              | 89          | 100           |
| <i>Enterococcus faecalis</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 491          |                         |                             |                    |              | 100          | 100            |                                                                                                                                                                                        | 100                        |                                 |              |             | 100           |
| <i>Enterococcus faecium</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 89           |                         |                             |                    |              |              |                |                                                                                                                                                                                        | 100                        |                                 |              |             | 92            |
| Group A <i>Streptococcus</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 108          | 100                     | 100                         | 100                | 100          | 100          | 100            | 100                                                                                                                                                                                    |                            |                                 | 83           | 83          | 100           |
| Group B <i>Streptococcus</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 54           | 100                     | 100                         | 100                | 100          | 100          | 100            | 100                                                                                                                                                                                    |                            |                                 | 63           | 63          | 100           |
| <i>Streptococcus pneumoniae</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 47           | 95                      | 100                         | 77                 | 100          |              |                |                                                                                                                                                                                        | 81                         |                                 | 79           |             | 100           |
| MRSA rate 6% of <i>Staphylococcus aureus</i> Blood Cultures 11% of <i>Staph. aureus</i> ER wounds<br>*Includes both meningitis and non-meningitis breakpoints when reported for <i>Streptococcus pneumoniae</i><br>Numbers do not reflect meningitis rates<br>~Can predict susceptibility to ampicillin (oral or parenteral), amoxicillin, amoxicillin-clavulanate, cephalosporins (I,II,III) and carbapenems<br>Shaded boxes = Not routinely reported or recommended      Red boxes = Predictably resistant |              |                         |                             |                    |              |              |                |                                                                                                                                                                                        |                            |                                 |              |             |               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |                         |                             |                    |              |              |                | ^ Daptomycin and Linezolid are available for <i>Staphylococcus aureus</i> infections with restrictions. Contact Antimicrobial Stewardship pharmacist or Infectious Diseases for advice |                            |                                 |              |             |               |

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## Anaerobic susceptibilities\*

### Predictably Susceptible:

Amoxicillin+Clavulanic Acid, Piperacillin+Tazobactam, Ertapenem, and Meropenem

### Also Predictably Susceptible:

Metronidazole (Except *Actinomyces* or *Propionibacterium* are intrinsically resistant)

Double anaerobic coverage when already on one of above antibiotics is discouraged.

### NOT-Predictably Susceptible:

Moxifloxacin, Doxycycline, Cefoxitin or Clindamycin

**Note:** Most beta-lactamase negative oral anaerobes are susceptible to Amoxicillin.

\*Bugs and Drugs (Canada); contact Microbiology Laboratory if testing required

For treatment guidelines and additional information on antimicrobial susceptibilities  
see the Health PEI Firstline app

(<https://firstline.org/health-pe/>)