

Northern Health Authority Annual Antibigram 2022*

| Northern Health Authority Gram Negative Organisms % Susceptible | # of isolates | Greater than or equal to 80% susceptibility = GOOD CHOICE | | | | | | Less than 80% susceptibility = POOR CHOICE | | | | | | | | |
|---|---------------|---|------------|-----------------------------|-----------|------------|----------|--|-------------|-----------|------------|------------|---------|---------------|--------------|-----------------------------|
| | | Amoxicillin/ Clavulanate | Ampicillin | Piperacillin/ Tazobactam | Cefazolin | Cefuroxime | Cefixime | Cefotaxime or Ceftriaxone | Ceftazidime | Meropenem | Gentamicin | Tobramycin | TMP/SMX | Ciprofloxacin | Moxifloxacin | Nitrofurantoin ^U |
| <i>Escherichia coli</i> | 4748 | 85 | 65 | 94 | 88 | - | 92 | 94 | - | 100 | 95 | 96 | 85 | 87 | - | 97 |
| <i>Citrobacter species</i> | 149 | R | R | R | R | - | R | R | - | 100 | 97 | 98 | 95 | 97 | - | 88 |
| <i>Enterobacter cloacae</i> | 271 | R | R | - | R | R | - | - | - | 100 | 99 | 99 | 93 | 97 | - | R |
| <i>Klebsiella aerogenes</i> ^A | 62 | R | R | - | R | R | - | - | - | 100 | 100 | 100 | 98 | 97 | - | R |
| <i>Klebsiella oxytoca</i> | 172 | 95 | R | 96 | 49 | - | 97 | 100 | - | 100 | 99 | 99 | 97 | 99 | - | 86 |
| <i>Klebsiella pneumoniae</i> | 497 | 95 | R | 96 | 93 | - | 97 | 97 | - | 99 | 98 | 98 | 95 | 96 | - | 33 |
| <i>Morganella morganii</i> | 66 | R | R | - | R | R | - | - | - | 100 | 92 | 94 | 86 | 86 | - | R |
| <i>Proteus mirabilis</i> | 242 | 97 | 76 | 99 | 79 | - | 95 | 98 | - | 100 | 94 | 97 | 92 | 95 | - | R |
| <i>Serratia marcescens</i> | 43 | R | R | - | R | R | - | - | - | 100 | 98 | 98 | 98 | 95 | - | R |
| <i>Pseudomonas aeruginosa</i> | 339 | R | R | 90 | R | R | R | R | | | | | R | 84 | - | - |
| <i>Haemophilus influenzae</i> ** | 25 | 100 | 80 | - | - | 100 | - | 100 | - | - | - | - | 79 | - | 100 | - |
| <i>Stenotrophomonas maltophilia</i> ** | 29 | - | R | - | R | - | - | R | - | R | R | R | 90 | - | - | R |

Notes Percent susceptible for each organism/antimicrobial combination was generated by including the first isolate of that organism encountered on a given patient.
MRSA incidence = 22% (proportion of total clinical isolates of *S. aureus* that are MRSA)

Legend

- Drug not tested or indicated
- \$ AST method not validated for this organism/antibiotic combination
- U Urinary tract infections only
- A Extrapolated from Cloxacillin
- B Extrapolated from Ampicillin
- C Extrapolated from Penicillin
- ^ *Klebsiella aerogenes*, formerly known as *Enterobacter aerogenes*
- † Total *Staphylococcus aureus* isolates (includes MSSA and MRSA)
- ‡ Represents clinical isolates - excludes colonization/screens
- R Intrinsic resistance
- 2 non-meningitis
- 3 meningitis
- ** Organisms with less than 30 isolates have decreased statistical validity

*Prepared by Ally King, Microbiology Quality Resource Technologist, January 2022 based on 2021 cumulative AST data from Jan. 1 2021 to Dec. 31 2021,
As per CLSI document M39-A4 Analysis and presentation of cumulative antimicrobial susceptibility tests data – approved guideline – 4th edition



northern health
the northern way of caring

10-201-6002 (IND Rev. 05/22)

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| Northern Health Authority Gram Positive Organisms % Susceptible | Greater than or equal to 80% susceptibility = GOOD CHOICE | | | | | | | Less than 80% susceptibility = POOR CHOICE | | | | | | | | | |
|---|---|------------------|------------------|-------------|-------------------------------------|------------------------|-------------------------------------|--|-------------|---------------|--------------|--------------|---------|--------------|-----------------------------|------------|-----------|
| | # of isolates | Amoxicillin | Ampicillin | Cloxacillin | Penicillin | Cefazolin ^A | Cefotaxime or Ceftriaxone | Erythromycin | Clindamycin | Ciprofloxacin | Moxifloxacin | Gent Synergy | TMP-SMX | Tetracycline | Nitrofurantoin ^U | Vancomycin | Linezolid |
| <i>Staphylococcus aureus</i> † | 1890 | - | - | 77 | - | 77 | - | 75 | 85 | - | - | - | 93 | 96 | - | 100 | - |
| <i>S. aureus (MRSA)</i> ‡ | 423 | R | R | R | - | R | R | R | 84 | - | - | - | 89 | 90 | - | 100 | 100 |
| <i>Staphylococcus epidermidis</i> | 180 | - | - | 56 | - | 56 | - | 53 | 75 | - | - | - | 77 | 87 | - | 100 | - |
| <i>Staphylococcus lugdunensis</i> | 80 | - | - | 95 | - | 95 | - | 79 | 93 | - | - | - | 100 | 99 | - | 100 | - |
| <i>Enterococcus faecalis</i> | 653 | 100 ^B | 100 | R | - | - | R | R | R | 88 | - | 86 | - | - | 99 | 99 | - |
| <i>Enterococcus faecium</i> | 96 | R | R | R | - | - | R | R | R | 12 | - | 82 | - | - | - | 49‡ | 99 |
| Group A Streptococcus | 521 | 100 ^C | 100 ^C | - | 100 | - | 100 ^{\$} | 82 | 82 | - | - | - | R | - | - | 100 | - |
| Group B Streptococcus | 458 | 100 ^C | 100 | - | 99 | - | 100 ^{\$} | 59 | 61 | - | - | - | R | - | - | 100 | - |
| Group C & G Streptococcus | 209 | 100 ^C | 100 ^C | - | 100 | - | 100 ^{\$} | 80 | 83 | - | - | - | R | - | - | 98 | - |
| <i>Streptococcus pneumoniae</i> | 45 | 100 | - | - | 100 ² 64 ³ | - | 100 ² 89 ³ | 78 | - | - | 100 | - | 78 | - | - | 100 | - |

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