

Toronto General Hospital ANTIBIOGRAM
Wards other than ICUs/Emergency/Transplant Unit
January 1, 2022 - December 31, 2022

All Specimen Isolates – % Susceptible

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|------------|-----------------------------|------------|---------------------------|-------------------------------|-------------------------|-----------|-----------|-------------|-----------|-------------|--------------------------|------------------------------|-------------|-------------|--------------|-------------|---------------|--------------|-------------------------------|------------|------------|----------|------------|-----------|------------|
| ≥80% Susceptible ■ 70-79% Susceptible ■ ≤69% Susceptible ■ | # | % | Ampicillin | Amoxicillin-Clavulanic acid | Penicillin | Penicillin W (meningitis) | Penicillin W (non-meningitis) | Piperacillin-Tazobactam | Meropenem | Ertapenem | Cloxacillin | Cefazolin | Ceftriaxone | Ceftriaxone (meningitis) | Ceftriaxone (non-meningitis) | Ceftazidime | Clindamycin | Erythromycin | Doxycycline | Ciprofloxacin | Moxifloxacin | Trimethoprim-Sulfamethoxazole | Gentamicin | Tobramycin | Amikacin | Vancomycin | Linezolid | Daptomycin |
|--|---|---|------------|-----------------------------|------------|---------------------------|-------------------------------|-------------------------|-----------|-----------|-------------|-----------|-------------|--------------------------|------------------------------|-------------|-------------|--------------|-------------|---------------|--------------|-------------------------------|------------|------------|----------|------------|-----------|------------|

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|---------------------|-----|---|---|----|--|--|--|----|----|----|--|----|----|--|--|--|--|--|--|--|--|----|--|--|--|--|--|--|
| ALL BACTERIA | 330 | — | 8 | 19 | | | | 41 | 55 | 42 | | 14 | 23 | | | | | | | | | 37 | | | | | | |
|---------------------|-----|---|---|----|--|--|--|----|----|----|--|----|----|--|--|--|--|--|--|--|--|----|--|--|--|--|--|--|

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|---------------------------------------|-----|-----|----|----|--|--|--|----|-----|-----|--|----|----|--|----|--|--|--|--|-----|----|-----|-----|-----|-----|--|--|--|
| ALL GRAM-NEGATIVE BACTERIA | 162 | 100 | 2 | 23 | | | | 52 | 96 | 68 | | 10 | 28 | | 53 | | | | | 64 | | 40 | 80 | 81 | 90 | | | |
| <i>Escherichia coli</i> | 41 | 25 | 0 | 39 | | | | 46 | 100 | 100 | | 7 | 51 | | 51 | | | | | 46 | | 29 | 78 | 62 | 90 | | | |
| <i>Pseudomonas aeruginosa</i> | 47 | 29 | | | | | | 85 | 86 | | | | | | 89 | | | | | 62 | | 69 | 95 | 77 | | | | |
| <i>Klebsiella pneumoniae</i> | 27 | 17 | 0 | 54 | | | | 63 | 100 | 100 | | 31 | 62 | | 62 | | | | | 56 | | 46 | 72 | 54 | 100 | | | |
| <i>Enterobacter cloacae</i> | 17 | 10 | 0 | 0 | | | | 0 | 100 | 88 | | 0 | 0 | | 0 | | | | | 94 | | 82 | 100 | 100 | 94 | | | |
| <i>Klebsiella oxytoca</i> | 7 | 4 | 0 | 57 | | | | 57 | 100 | 100 | | 25 | 57 | | 57 | | | | | 86 | | 71 | 100 | 100 | 100 | | | |
| <i>Proteus mirabilis</i> | 54 | 33 | 32 | 94 | | | | 98 | 100 | 100 | | 24 | 98 | | 98 | | | | | 81 | | 83 | 92 | 88 | 94 | | | |
| <i>Citrobacter freundii</i> complex | 5 | 3 | 0 | 0 | | | | 0 | 100 | 100 | | 0 | 0 | | 0 | | | | | 75 | | 100 | 100 | 100 | 100 | | | |
| <i>Serratia marcescens</i> | 5 | 3 | 0 | 0 | | | | 0 | 100 | 100 | | 0 | 0 | | 0 | | | | | 80 | | 100 | 100 | 100 | 100 | | | |
| <i>Klebsiella aerogenes</i> | 26 | 16 | 0 | 0 | | | | 0 | 100 | 100 | | 0 | 0 | | 0 | | | | | 96 | | 96 | 100 | 100 | 100 | | | |
| <i>Stenotrophomonas maltophilia</i> * | 26 | 16 | | | | | | | | | | | | | | | | | | | 68 | 88 | | | | | | |
| <i>Morganella morganii</i> | 20 | 12 | 0 | 0 | | | | 5 | 95 | 95 | | 0 | 0 | | 0 | | | | | 95 | | 89 | 95 | 100 | 100 | | | |
| <i>Citrobacter koseri</i> | 19 | 12 | 0 | 0 | | | | 0 | 100 | 100 | | 0 | 0 | | 0 | | | | | 100 | | 100 | 100 | 100 | 100 | | | |
| <i>Haemophilus influenzae</i> ** | 18 | 11 | 61 | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Citrobacter braakii</i> | 8 | 5 | 0 | 0 | | | | 0 | 100 | 100 | | 0 | 0 | | 0 | | | | | 75 | | 75 | 100 | 100 | 100 | | | |
| <i>Moraxella catarrhalis</i> ^ | 6 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Providencia stuartii</i> | 6 | 4 | 0 | 0 | | | | 0 | 100 | 100 | | 0 | 0 | | 0 | | | | | 50 | | 100 | 67 | 67 | 100 | | | |

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|---|-----|-----|----|----|-----|-----|--|-----|-----|-----|-----|-----|-----|-----|--|----|----|----|--|--|-----|----|-----|----|---|-----|-----|-----|
| ALL GRAM-POSITIVE BACTERIA | 168 | 100 | 14 | 14 | 2 | | | 30 | 18 | 18 | 16 | 18 | 18 | | | 30 | 21 | | | | 34 | | | | | 89 | 32 | |
| Coagulase-negative staphylococci | 72 | 43 | | | | | | 14 | 14 | 14 | 14 | 14 | | | | 48 | 33 | 95 | | | 48 | | | | | 100 | 100 | |
| <i>Staphylococcus aureus</i> , all isolates | 23 | 14 | | | | | | 74 | 74 | 74 | 74 | 74 | | | | 64 | 50 | 87 | | | 96 | | | | | 100 | 100 | |
| - methicillin-susceptible | 17 | 10 | | | | | | 100 | 100 | 100 | 100 | 100 | | | | 69 | 62 | 94 | | | 100 | | | | | 100 | 100 | |
| - methicillin-resistant (MRSA) | 6 | 4 | | | | | | 0 | 0 | 0 | 0 | 0 | | | | 50 | 17 | 67 | | | 83 | | | | | 100 | 100 | |
| <i>Enterococcus faecalis</i> | 18 | 11 | 94 | 94 | | | | 94 | | | | | | | | | | | | | | | | | | 100 | | |
| <i>Enterococcus faecium</i> , all isolates | 50 | 30 | 6 | 6 | | | | 6 | | | | | | | | | | | | | | | | | | 68 | | |
| - vancomycin-susceptible | 34 | 20 | 9 | 9 | | | | 9 | | | | | | | | | | | | | | | | | | 100 | | |
| - vancomycin-resistant (VRE) | 16 | 10 | 0 | 0 | | | | 0 | | | | | | | | | | | | | | | | | | 0 | 100 | 100 |
| Viridans group streptococci* | 2 | 1 | | | 50 | | | | | | | | 100 | | | | | | | | | | | | | 100 | | |
| <i>Streptococcus anginosus</i> group** | 2 | 1 | | | 100 | | | | | | | | 100 | | | | | | | | | | | | | 100 | | |
| <i>Streptococcus pneumoniae</i> | 24 | 14 | | | 100 | 100 | | | | | | | 100 | 100 | | | | | | | 82 | 78 | | 96 | | 100 | | |
| <i>Staphylococcus lugdunensis</i> | 2 | 1 | | | | | | 50 | 50 | 50 | 50 | 50 | | | | | | | | | 50 | 50 | 100 | | 0 | | 100 | 100 |
| Group B streptococci** | 10 | 6 | | | 100 | | | | | | | | | | | | | | | | 50 | 50 | | | | 100 | | |
| <i>Mycobacterium tuberculosis</i> complex | 8 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group A streptococci** | 9 | 5 | | | 100 | | | | | | | | | | | | | | | | 38 | 78 | | | | 100 | | |
| Group G streptococci** | 5 | 3 | | | 100 | | | | | | | | | | | | | | | | 80 | 80 | | | | 100 | | |

General Notes:

- Statistical validity of estimates of percent susceptibility for organisms for which there are fewer than 30 isolates reported is limited. Please take this into consideration when interpreting the reported results.
- Some organisms for which there were only very small numbers have been excluded from this report; however the total number of "ALL BACTERIA", "ALL GRAM-NEGATIVE BACTERIA", and "ALL GRAM-POSITIVE BACTERIA" listed includes these organisms.
- Reported susceptibilities for "ALL BACTERIA", "ALL GRAM-NEGATIVE BACTERIA", and "ALL GRAM-POSITIVE BACTERIA" reflect estimates only based on the weighted average of susceptibilities for all organisms included on this report as well as those that have been excluded, with assumptions made for those drugs for which susceptibilities were not tested.
- Susceptibility to doxycycline was predicted based on tetracycline susceptibility testing results.

Organism-Specific Notes:

- ^ *M. catarrhalis*: Susceptibility testing is not routinely performed. Most isolates are resistant to ampicillin and amoxicillin but are generally susceptible to other antibiotics commonly used for respiratory infections.
- ** *H. influenzae* and *H. parainfluenzae*: Susceptibility to ampicillin was determined using beta-lactamase testing. Beta-lactamase-positive isolates are resistant to ampicillin but are generally susceptible to amoxicillin-clavulanic acid and cefuroxime.
- ** Beta-hemolytic streptococci: Susceptibility testing to penicillin is not routinely performed since resistant strains have not been recognized. All isolates are considered susceptible to penicillin.
- * Viridans group streptococci: Please note that only a small proportion of these isolates were tested for susceptibilities. Please take this into consideration when interpreting the reported results.
- ^ *S. maltophilia*: Susceptibility to moxifloxacin was predicted based on levofloxacin susceptibility testing results.
- ** *S. anginosus* group: Please note that only a small proportion of these isolates were tested for susceptibilities. Please take this into consideration when interpreting the reported results.

Toronto General Hospital ANTIBIOGRAM
Wards other than ICUs/Emergency/Transplant Unit
January 1, 2022 - December 31, 2022

Respiratory Isolates – % Susceptible

| | | <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: left;"> <p>≥80% Susceptible ■</p> <p>70-79% Susceptible ■</p> <p>≤69% Susceptible ■</p> </div> <div style="text-align: center;"> <p># %</p> </div> </div> | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----|--|-----------------------------|------------|----------------------------|--------------------------------|-------------------------|-----------|-----------|-------------|-----------|-------------|--------------------------|------------------------------|-------------|-------------|--------------|-------------|---------------|--------------|-------------------------------|------------|------------|----------|------------|-----------|
| | | Ampicillin | Amoxicillin-Clavulanic acid | Penicillin | Penicillin IV (meningitis) | Penicillin IV (non-meningitis) | Piperacillin-Tazobactam | Meropenem | Ertapenem | Cloxacillin | Cefazolin | Ceftriaxone | Ceftriaxone (meningitis) | Ceftriaxone (non-meningitis) | Ceftazidime | Clindamycin | Erythromycin | Doxycycline | Ciprofloxacin | Moxifloxacin | Trimethoprim-Sulfamethoxazole | Gentamicin | Tobramycin | Amikacin | Vancomycin | Linezolid |
| ALL BACTERIA | 271 | — | 8 | 17 | | | 74 | 78 | 28 | | 22 | 46 | | | | | | | | | 51 | | | | | |
| ALL GRAM-NEGATIVE BACTERIA | 189 | 100 | 12 | 24 | | | 73 | 85 | 13 | | 5 | 31 | | | 71 | | | | 64 | | 32 | 74 | 77 | 70 | | |
| <i>Pseudomonas aeruginosa</i> | 96 | 51 | | | | | 78 | 75 | | | | | | | 81 | | | | 70 | | | 65 | 95 | 79 | | |
| <i>Haemophilus influenzae</i> ^^ | 24 | 13 | 75 | | | | | | | | | | | | | | | | | | | | | | | |
| <i>Klebsiella pneumoniae</i> | 15 | 8 | 0 | 93 | | | 86 | 100 | | | | 93 | | 93 | | | | 86 | | 100 | 100 | | | | | |
| <i>Stenotrophomonas maltophilia</i> † | 13 | 7 | | | | | | | | | | | | | | | | | | 69 | 85 | | | | | |
| <i>Escherichia coli</i> | 10 | 5 | 0 | 20 | | | 40 | 100 | 100 | | | 50 | | 50 | | | | 40 | | 40 | 80 | 50 | 100 | | | |
| <i>Enterobacter cloacae</i> | 7 | 4 | 0 | 0 | | | 0 | 100 | 86 | | | 0 | | 0 | | | | | 86 | | 57 | 100 | 100 | 100 | | |
| <i>Moraxella catarrhalis</i> * | 7 | 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| ALL GRAM-POSITIVE BACTERIA | 82 | 100 | | 13 | | | 77 | 63 | 63 | 63 | 63 | 77 | | | 71 | 57 | | | | | 94 | | | | 95 | |
| <i>Staphylococcus aureus</i> , all isolates | 67 | 82 | | | | | 78 | 78 | 78 | 78 | 78 | | | | 73 | 58 | 95 | | | | 100 | | | | 100 | 100 |
| - methicillin-susceptible | 52 | 63 | | | | | 100 | 100 | 100 | 100 | 100 | | | | 77 | 67 | 96 | | | | 100 | | | | 100 | 100 |
| - methicillin-resistant (MRSA) | 15 | 18 | | | | | 0 | 0 | 0 | 0 | 0 | | | | 60 | 27 | 93 | | | | 100 | | | | 100 | 100 |
| <i>Streptococcus pneumoniae</i> | 11 | 13 | | | 100 | 100 | | | | | | 100 | 100 | | 82 | 73 | | | | 91 | | | | | 100 | |
| <i>Mycobacterium tuberculosis complex</i> | 4 | 5 | | | | | | | | | | | | | | | | | | | | | | | | |

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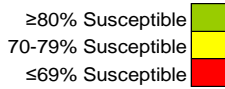
Toronto General Hospital ANTIBIOGRAM

Wards other than ICUs/Emergency/Transplant Unit

January 1, 2022 - December 31, 2022

Urine Isolates – % Susceptible

| | # | % | Ampicillin | Amoxicillin-Clavulanic acid | Piperacillin-Tazobactam | Meropenem | Ertapenem | Cloxacillin | Cefazolin | Cephalexin | Ceftriaxone | Ceftazidime | Doxycycline | Ciprofloxacin | Trimethoprim-Sulfamethoxazole | Nitrofurantoin | Gentamicin | Tobramycin | Amikacin | Vancomycin | Linezolid | Daptomycin |
|--|---|---|------------|-----------------------------|-------------------------|-----------|-----------|-------------|-----------|------------|-------------|-------------|-------------|---------------|-------------------------------|----------------|------------|------------|----------|------------|-----------|------------|
| | | | | | | | | | | | | | | | | | | | | | | |



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|---------------------|------|---|----|----|----|----|----|--|--|---|---|----|--|--|----|----|----|--|--|--|--|--|
| ALL BACTERIA | 1197 | — | 23 | 57 | 69 | 71 | 64 | | | 7 | 2 | 44 | | | 68 | 47 | 67 | | | | | |
|---------------------|------|---|----|----|----|----|----|--|--|---|---|----|--|--|----|----|----|--|--|--|--|--|

| ALL GRAM-NEGATIVE BACTERIA | 840 | 100 | 4 | 53 | 67 | 99 | 89 | | | | 60 | 69 | | 72 | 64 | 63 | 91 | 58 | 92 | | |
|-------------------------------------|-----|-----|----|----|----|-----|-----|--|--|---|----|----|--|-----|-----|-----|-----|-----|-----|--|--|
| <i>Escherichia coli</i> | 410 | 49 | 7 | 63 | 71 | 100 | 100 | | | | 75 | 75 | | 58 | 64 | 97 | 88 | 40 | 89 | | |
| <i>Klebsiella pneumoniae</i> | 160 | 19 | 0 | 79 | 79 | 99 | 100 | | | | 83 | 83 | | 76 | 70 | 28 | 92 | 58 | 95 | | |
| <i>Pseudomonas aeruginosa</i> | 82 | 10 | | | 95 | 96 | | | | | | 98 | | 84 | | | 91 | 99 | 93 | | |
| <i>Enterobacter cloacae</i> | 41 | 5 | 0 | 0 | 0 | 100 | 93 | | | 0 | 0 | 0 | | 98 | 85 | 54 | 100 | 100 | 98 | | |
| <i>Klebsiella oxytoca</i> | 37 | 4 | 0 | 83 | 84 | 100 | 100 | | | | 83 | 83 | | 92 | 86 | 95 | 97 | 50 | 100 | | |
| <i>Proteus mirabilis</i> | 32 | 4 | 20 | 94 | 97 | 100 | 100 | | | | 97 | 97 | | 88 | 84 | 3 | 91 | 50 | 75 | | |
| <i>Klebsiella aerogenes</i> | 15 | 2 | 0 | 0 | 0 | 100 | 100 | | | 0 | 0 | 0 | | 93 | 93 | 7 | 100 | 100 | 100 | | |
| <i>Morganella morganii</i> | 15 | 2 | 0 | 0 | 7 | 93 | 93 | | | 0 | 0 | 0 | | 100 | 100 | 7 | 100 | 100 | 100 | | |
| <i>Citrobacter freundii complex</i> | 13 | 2 | 0 | 0 | 0 | 100 | 92 | | | 0 | 0 | 0 | | 100 | 92 | 100 | 100 | 100 | 100 | | |
| <i>Citrobacter koseri</i> | 13 | 2 | 0 | 0 | 0 | 100 | 100 | | | 0 | 0 | 0 | | 100 | 100 | 92 | 100 | 100 | 100 | | |
| <i>Serratia marcescens</i> | 11 | 1 | 0 | 0 | 0 | 100 | 100 | | | 0 | 0 | 0 | | 73 | 91 | 0 | 100 | 91 | 100 | | |

| ALL GRAM-POSITIVE BACTERIA | 357 | 100 | 67 | 67 | 73 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 34 | 59 | 7 | 76 | | | 93 | 98 | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|---|-----|-----|----|-----|--|--|-----|-----|----|
| <i>Enterococcus faecalis</i> | 230 | 64 | 100 | 100 | 100 | | | | | | | | 32 | 88 | | 100 | | | 100 | 100 | |
| <i>Enterococcus faecium</i> , all isolates | 96 | 27 | 6 | 6 | 6 | | | | | | | | 21 | 5 | | 9 | | | 74 | 95 | |
| - vancomycin-susceptible | 71 | 20 | 8 | 8 | 8 | | | | | | | | 25 | 7 | | 7 | | | 100 | 96 | |
| - vancomycin-resistant (VRE) | 25 | 7 | 0 | 0 | 0 | | | | | | | | 8 | 0 | | 16 | | | 0 | 92 | 96 |
| <i>Staphylococcus aureus</i> , all isolates | 27 | 8 | | | 81 | 81 | 81 | 81 | 81 | 81 | | | 93 | 0 | 92 | 100 | | | 100 | 100 | |
| - methicillin-susceptible | 22 | 6 | | | 100 | 100 | 100 | 100 | 100 | 100 | | | 100 | 0 | 95 | 100 | | | 100 | 100 | |
| - methicillin-resistant (MRSA) | 5 | 1 | | | 0 | 0 | 0 | 0 | 0 | 0 | | | 60 | | 80 | 100 | | | 100 | 100 | |
| <i>Enterococcus avium</i> | 4 | 1 | 100 | 100 | 100 | | | | | | | | 25 | 100 | | 75 | | | 100 | | |
| <i>Enterococcus gallinarum</i> | 2 | 1 | 100 | 100 | 100 | | | | | | | | 100 | 100 | | 100 | | | 100 | | |

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