

# Antimicrobial Susceptibility Test Results for Gram-negative isolates recovered from adult and paediatric clinical specimens: 2024

Department of Clinical Microbiology, Auckland City Hospital. Clinical Microbiologists can be contacted through Lablink on 09 3078995 or 0800 5227587



≥ 90% susceptible;
70-89% susceptible;
< 70% susceptible;
 Number = proportion susceptible (S/I); R = Resistant

| Classification Number: LPMICCOMIN008<br>Date of issue: June 2025 |               |             |                         |                        |            |                 |                  |          |                         |           |            |          |                           |               |               |                          |                             |
|------------------------------------------------------------------|---------------|-------------|-------------------------|------------------------|------------|-----------------|------------------|----------|-------------------------|-----------|------------|----------|---------------------------|---------------|---------------|--------------------------|-----------------------------|
| Organism                                                         | Number tested | Amoxycillin | Amoxycillin-clavulanate | Cefalexin <sup>c</sup> | Cefuroxime | Ceftriaxone     | Ceftazidime      | Cefepime | Piperacillin-tazobactam | Meropenem | Gentamicin | Amikacin | Trimethoprim <sup>c</sup> | Cotrimoxazole | Ciprofloxacin | Norfloxacin <sup>c</sup> | Nitrofurantoin <sup>c</sup> |
| <i>Escherichia coli</i> – all                                    | 3949          | 38          | 76                      | 74                     | 81         | 86              | 85               | 87       | 91                      | 99        | 87         | 99       | 65                        | 66            | 78            | 71                       | 99                          |
| ESBL <i>Escherichia coli</i> <sup>a</sup>                        | 389           | R           | -                       | R                      | R          | R               | R                | R        | -                       | 99        | 57         | 96       | 36                        | 37            | 24            | 12                       | 97                          |
| <i>Klebsiella pneumoniae</i> – all                               | 705           | R           | 82                      | 80                     | 82         | 85              | 83               | 87       | 86                      | 99        | 90         | 99       | 75                        | 77            | 80            | 76                       | 77                          |
| ESBL <i>Klebsiella pneumoniae</i>                                | 70            | R           | -                       | R                      | R          | R               | R                | R        | -                       | 96        | 49         | 97       | 17                        | 16            | 14            | 10                       | 50                          |
| <i>Klebsiella (Enterobacter) aerogenes</i>                       | 125           | R           | R                       | R                      | R          | 69 <sup>b</sup> | 70 <sup>b</sup>  | 96       | 67 <sup>b</sup>         | 98        | 100        | 100      | 98                        | 100           | 98            | 90                       | 81                          |
| <i>Klebsiella oxytoca</i>                                        | 147           | R           | 85                      | 85                     | 87         | 92 <sup>b</sup> | 95 <sup>b</sup>  | 95       | 88 <sup>b</sup>         | 99        | 96         | 99       | 82                        | 82            | 93            | 93                       | 99                          |
| <i>Proteus mirabilis</i>                                         | 331           | 74          | 85                      | 96                     | 97         | 97              | 97               | 96       | 100                     | 100       | 89         | 98       | 79                        | 80            | 95            | 94                       | R                           |
| <i>Enterobacter cloacae</i> complex                              | 233           | R           | R                       | R                      | R          | 72 <sup>b</sup> | 72 <sup>b</sup>  | 89       | 72 <sup>b</sup>         | 100       | 90         | 98       | 83                        | 85            | 93            | 89                       | 97                          |
| <i>Serratia marcescens</i>                                       | 232           | R           | R                       | R                      | R          | 99 <sup>b</sup> | 100 <sup>b</sup> | 100      | 100 <sup>b</sup>        | 100       | 100        | 100      | 98                        | 98            | 97            | 95                       | R                           |
| <i>Morganella morganii</i>                                       | 107           | R           | R                       | R                      | R          | 95 <sup>b</sup> | 86 <sup>b</sup>  | 95       | 96 <sup>b</sup>         | 100       | 95         | 100      | 87                        | 89            | 95            | 95                       | R                           |
| <i>Citrobacter koseri</i>                                        | 112           | R           | 94                      | 91                     | 88         | 98              | 96               | 100      | 95                      | 100       | 98         | 100      | 97                        | 98            | 98            | 98                       | 98                          |
| <i>Citrobacter freundii</i>                                      | 43            | R           | R                       | R                      | R          | 60 <sup>b</sup> | 60 <sup>b</sup>  | 98       | 70 <sup>b</sup>         | 100       | 98         | 100      | 98                        | 100           | 100           | 100                      | 100                         |
| <i>Pseudomonas aeruginosa</i>                                    | 777           | R           | R                       | R                      | R          | R               | 88               | 92       | 93                      | 96        | -          | 97       | R                         | R             | 87            | -                        | R                           |
| <i>Stenotrophomonas maltophilia</i>                              | 58            | R           | R                       | R                      | R          | R               | -                | R        | R                       | R         | R          | R        | -                         | 99            | -             | -                        | -                           |
| <i>Acinetobacter</i> spp.                                        | 46            | R           | R                       | R                      | R          | -               | -                | -        | -                       | 100       | 100        | 100      | -                         | 91            | 91            | -                        | -                           |
| <i>Haemophilus influenzae</i> <sup>d</sup>                       | 356           | 55          | 68                      | -                      | -          | 93              | -                | -        | 100                     | -         | -          | -        | -                         | 68            | -             | -                        | -                           |

<sup>a</sup> 96% and 92% of ESBL *E. coli* susceptible to fosfomycin and mecillinam respectively

<sup>b</sup> *E. cloacae*, *K. aerogenes*, *S. marcescens*, *M. morganii*, and *C. freundii* may develop resistance during treatment with third generation cephalosporins and β-lactam/β-lactamase inhibitor combinations.

<sup>c</sup> Cefalexin, nitrofurantoin, trimethoprim, and norfloxacin susceptibility results apply to uncomplicated lower urinary tract infection only

<sup>d</sup> 97% of *H. influenzae* isolates were susceptible to tetracycline/doxycycline.

See [http://www.surv.esr.cri.nz/antimicrobial/neisseria\\_meningitidis.php](http://www.surv.esr.cri.nz/antimicrobial/neisseria_meningitidis.php) for information on antimicrobial susceptibility among *Neisseria meningitidis* isolates.