

**VICTORIA REFERENCE LABORATORY**

**OVERVIEW**

The following is a profile of antimicrobial susceptibility testing results of commonly reported respiratory tract, skin and soft tissue and urinary tract pathogens submitted to MDS Metro Laboratory Services. The information in the antimicrobial susceptibility profile is to be used only as a guide, and we emphasize that culture and susceptibility testing are required for accurate determination of etiology and antimicrobial susceptibility. For further information contact a medical microbiologist at MDS Metro, phone (604) 431-5005. See also at [http://www.mdsdx.com/MDS\\_Metro\\_Laboratories/Health\\_Care/Antimicrobial\\_Susceptibility\\_Profile.asp](http://www.mdsdx.com/MDS_Metro_Laboratories/Health_Care/Antimicrobial_Susceptibility_Profile.asp).

**Respiratory Tract Pathogens  
July 1, 2005 – December 31, 2005**

The most commonly isolated respiratory tract pathogens were *Haemophilus influenzae*, *Moraxella catarrhalis*, *Streptococcus pneumoniae* and *Pseudomonas aeruginosa*. Susceptibility testing for *M. catarrhalis* is not routinely performed. Most clinical isolates of *M. catarrhalis* are resistant to amoxicillin but are generally susceptible to amoxicillin clavulanate, macrolides, trimethoprim-sulfamethoxazole, quinolones, cefuroxime, cefixime, and ceftriaxone.

| ORGANISM                        | Number of isolates tested | ANTIBIOTIC (% susceptible) |              |             |            |               |                |              |            |              |            |              |              |                               |    |
|---------------------------------|---------------------------|----------------------------|--------------|-------------|------------|---------------|----------------|--------------|------------|--------------|------------|--------------|--------------|-------------------------------|----|
|                                 |                           | Ampicillin                 | Azithromycin | Ceftazidime | Cefuroxime | Ciprofloxacin | Clarithromycin | Erythromycin | Gentamicin | Levofloxacin | Penicillin | Piperacillin | Tetracycline | Trimethoprim/Sulfamethoxazole |    |
| <i>Haemophilus influenzae</i>   | 65                        | 88                         |              |             | 98         |               | 86             | N/R          |            |              |            |              |              | 99                            | 83 |
| <i>Streptococcus pneumoniae</i> | 17                        | 88                         | 94           |             |            | N/R           | 94             | 94           | R          | 100          | 88         |              |              | 94                            | 82 |
| <i>Pseudomonas aeruginosa</i>   | 48                        | R                          | R            | 100         | R          | 90            | R              | R            | 88         |              | R          | 100          | R            | R                             | R  |

**Skin and Soft tissue Pathogens  
January 1, 2005 – December 31, 2005**

| ORGANISM                            | Number of isolates tested | ANTIBIOTIC (% susceptible) |              |             |                        |               |                |             |             |              |              |            |              |                               |            |
|-------------------------------------|---------------------------|----------------------------|--------------|-------------|------------------------|---------------|----------------|-------------|-------------|--------------|--------------|------------|--------------|-------------------------------|------------|
|                                     |                           | Ampicillin                 | Azithromycin | Ceftriaxone | Cephalothin/Cephalexin | Ciprofloxacin | Clarithromycin | Clindamycin | Cloxacillin | Erythromycin | Levofloxacin | Penicillin | Tetracycline | Trimethoprim/Sulfamethoxazole | Vancomycin |
| Streptococcus group A               | 27                        | 100                        | 58           | 100         | *                      | N/R           | 58             | 57          | N/R         | 58           | 100          | 100        |              | R                             | 100        |
| <i>Staphylococcus aureus</i> (MSSA) | 1792                      |                            |              |             | 100                    |               |                |             | 100         | 82           |              |            | 96           |                               |            |
| <i>Staphylococcus aureus</i> (MRSA) | 517                       | R                          |              | R           | 0                      | 6             |                | 79          | 0           | 6            |              | R          | 90           | 94                            | 100        |

**Please note:** Susceptibility testing for Streptococcus group A is not routinely performed but was performed at physician's request.

\* Streptococcus group A isolates that are susceptible to penicillin can be considered susceptible to cephalothin/cephalexin.

MSSA = Methicillin-susceptible *Staphylococcus aureus*; MRSA = Methicillin-resistant *Staphylococcus aureus*

**Urinary Tract Pathogens  
January 1, 2005 – December 31, 2005**

| ORGANISM                            | Number of isolates tested | ANTIBIOTIC (% susceptible) |                        |               |            |                |             |              |                               |             |              |
|-------------------------------------|---------------------------|----------------------------|------------------------|---------------|------------|----------------|-------------|--------------|-------------------------------|-------------|--------------|
|                                     |                           | Ampicillin                 | Cephalothin/Cephalexin | Ciprofloxacin | Gentamicin | Nitrofurantoin | Norfloxacin | Tetracycline | Trimethoprim/Sulfamethoxazole | Ceftazidime | Piperacillin |
| <i>Escherichia coli</i>             | 10274                     | 65                         | 58                     | 79            | 96         | 96             | 80          | 78           | 80                            |             |              |
| <i>Enterococcus</i> spp.            | 1854                      | 98                         | R                      | 65            |            | 94             | 44          | 26           | N/R                           | R           |              |
| <i>Klebsiella pneumoniae</i>        | 1125                      | 0                          | 94                     | 95            | 99         | 32             | 95          | 88           | 95                            |             |              |
| <i>Proteus</i> spp.                 | 308                       | 88                         | 90                     | 96            | 94         | 0              | 100         | 0            | 92                            |             |              |
| <i>Pseudomonas aeruginosa</i>       | 259                       | R                          | R                      | 69            | 91         | R              | 70          | R            | R                             | 98          |              |
| <i>Staphylococcus saprophyticus</i> | 347                       |                            |                        | 99.7          |            | 99.7           | 99.7        | 95           | 94                            | N/R         |              |
| <i>Klebsiella oxytoca</i>           | 202                       | 0                          | 77                     | 98            | 99         | 80             | 99          | 100          | 96                            |             |              |

**R** The organism is inherently resistant to the antibiotic indicated.

Antimicrobial susceptibility testing not performed.

**N/R** Not recommended due to poor clinical response and/or poor activity.