

BURNABY 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.

**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>	137	86			99		93	N/R					99	83
<i>Streptococcus pneumoniae</i>	61	90	66			N/R	66	66	R	100	90		82	82
<i>Pseudomonas aeruginosa</i>	46	R	R	93	R	80	R	R	89		R	93	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	109	100	56	100	*	N/R	56	57	N/R	56	100	100		R	100
<i>Staphylococcus aureus</i> (MSSA)	3117				100				100	77			93		
<i>Staphylococcus aureus</i> (MRSA)	1250	R		R	0	6		60	0	4		R	85	89	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>	19675	61	60	82	93	96	82	73	78		
<i>Enterococcus</i> spp.	3061	99.6	R	72		97	58	23	N/R	R	
<i>Klebsiella pneumoniae</i>	1679	0	95	97	99	29	98	87	94		
<i>Proteus</i> spp.	755	78	87	87	92	0	94	0	85		
<i>Pseudomonas aeruginosa</i>	294	R	R	65	89	R	70	R	R	93	97
<i>Staphylococcus saprophyticus</i>	568			99		99.8	99	94	97	N/R	
<i>Klebsiella oxytoca</i>	242	0	89	99	99	87	99	94	97		

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.