

**Saskatoon Health Region ANTIBIOGRAM 2016**  
**ADULT INPATIENT - NON-urine Isolates**  
**January 1, 2016 - December 31, 2016**

**Inpatients – % Susceptible**

	# Isolates tested	Penicillin IV	Penicillin IV - meningitis	Ampicillin/Amoxicillin	Cloxacillin	Amoxicillin-Clavulanic acid	Piperacillin-Tazobactam	Cefazolin	Cefoxitin	Cefuroxime	Ceftriaxone	Ceftriaxone - meningitis	Ceftazidime	Meropenem	Ertapenem	Clindamycin	Azithromycin	Erythromycin	Tetracycline/Doxycycline	Ciprofloxacin	Moxifloxacin	Trimethoprim-Sulfamethoxazole	Nitrofurantoin (urine only)	Gentamicin <sup>4</sup>	Tobramycin	Vancomycin
<b>GRAM-NEGATIVE BACTERIA</b>																										
<i>Escherichia coli</i> <sup>1</sup>	1449			43		78	94	65	88		76		76	100	99					69		74	96	89	90	
<i>Enterobacter aerogenes</i> <sup>2</sup>	68			R		R	56	R	R		56		59	99	97					97		99	R	100	100	
<i>Enterobacter cloacae</i> <sup>2</sup>	139			R		R	64	R	R		61		63	99	78					94		94	38	99	99	
<i>Haemophilus influenzae</i>	82			67						85	100						100				100	70				
<i>Klebsiella pneumoniae</i> <sup>1</sup>	455			R		95	95	77	84		82		82	99	99					92		83	51	98	98	
<i>Klebsiella oxytoca</i>	116			R		90	90	41	96		94		97	100	99					97		94	93	98	98	
<i>Pseudomonas aeruginosa</i> <sup>2</sup>	358						85						82	85						79				88	95	
<i>Proteus mirabilis</i>	113			74		98	100	80	96		98		99	100	100					99		88	R	98	98	
<i>Citrobacter freundii</i> <sup>2</sup>	35			R		R	83	R	R		71		72	100	100					80		74	100	86	86	
<i>Citrobacter koseri</i> <sup>2</sup>	36			R		100	100	92	83		100		100	100	100					100		96	96	100	100	
<i>Serratia marcescens</i> <sup>2</sup>	36			R		R	100	R	R		100		100	100	100					91		89	R	97	97	

	# Isolates tested	Penicillin IV	Penicillin IV - meningitis	Ampicillin/Amoxicillin	Cloxacillin	Amoxicillin-Clavulanic acid	Piperacillin-Tazobactam	Cefazolin	Cefoxitin	Cefuroxime	Ceftriaxone	Ceftriaxone - meningitis	Ceftazidime	Meropenem	Ertapenem	Clindamycin	Azithromycin	Erythromycin	Tetracycline/Doxycycline	Ciprofloxacin	Moxifloxacin	Trimethoprim-Sulfamethoxazole	Nitrofurantoin (urine only)	Gentamicin <sup>4</sup>	Tobramycin	Vancomycin
<b>GRAM-POSITIVE BACTERIA</b>																										
<i>Staphylococcus aureus</i> , all																										
- methicillin-susceptible (MSSA)	674				100			100	100							81		77	98	95	95	97	99	99		99
- methicillin-resistant (MRSA)	352	R	R	R	R	R	R	R	R	R	R	R	R	R	R	55		37	99	55	56	94	100	88		100
<i>Staphylococcus epidermidis</i>	223				27				44							53		35	87	50	51	54	100	80		100
<i>Streptococcus pneumoniae</i>	117	96	80							87	100	95				89		77			100					100
Group A Streptococcus	75	100									100					79		81								100
Group B Streptococcus	27	100									100					33		33								100
<i>Streptococcus anginosus</i> group <sup>3</sup> ‡	22	95									95					86		77								100
<i>Streptococcus mitis/oralis</i> ‡	22	55									77					77		36								100
<i>Enterococcus faecalis</i> , excl.urine	664			100				R	R	R	R	R	R			R		R	R	72	74		99			100
<i>Enterococcus faecium</i> , excl.urine	462			R				R	R	R	R	R	R			R		R	52	R	R		33			45

R - intrinsically resistant or less than 25% empiric susceptibility

‡ Isolates containing less than 30 reported specimens should be interpreted using presented data ALONG WITH clinical judgement and/or input from infectious diseases service

<sup>1</sup> 7.9% of E.coli (n=115) and 6.4% of K.pneumoniae (n=29) were +ESBL (extended spectrum beta-lactamase)

<sup>2</sup> these organisms may produce inducible beta-lactamase (AmpC) enzymes. Use of beta-lactams can result in clinical failure despite in vitro susceptibility

<sup>3</sup> Streptococcus anginosus group includes: *S. anginosus*, *S. constellatus*, *S. intermedius*

<sup>4</sup> susceptibility to gentamicin in gram positive organisms refers to combination synergy treatment only