Princess Margaret Hospital ANTIBIOGRAM
All Inpatients and Outpatients
January 1, 2016 - December 31, 2016

Blood Isolates — % Susceptible

≥80% Susceptible
70-79% Susceptible
≤69% Susceptible

	#	%	Ampicillin	Amoxicillin-Clavulanic acid	Penicillin	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Ceftriaxone	Ceftazidime	Clindamycin	Erythromycin	Doxycycline	Ciprofloxacin	Moxifloxacin	Trimethoprim-Sulfamethoxazole	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid
ALL BACTERIA	**438**	—	15	25		48	54	47		35	48							56					
ALL GRAM-NEGATIVE BACTERIA	**139**	**100**	8	41		69	98	69		34	56	65				60		61	87	85	94		
Escherichia coli	**54**	**39**	17	48		63	100	100		37	72	72				37		54	80	74	98		
Klebsiella pneumoniae	**28**	**20**	0	96		93	100	100		89	96	96				96		93	100	96	100		
Pseudomonas aeruginosa	**21**	**15**				76	86					71				67			81	86	100		
Stenotrophomonas maltophilia ‘	**14**	**10**															93	100					
Enterobacter cloacae	**7**	**5**	0	0		0	100	86		0	0	0				100		57	86	86	100		
ALL GRAM-POSITIVE BACTERIA	**299**	**100**	18	18	16	39	36	36	20	36	45		36	17				54				96	
Coagulase-negative staphylococci	**166**	**56**				28	28	28	28	28			42	15	88			62				100	100
Viridans group streptococci °	**72**	**24**			61						97											97	
Enterococcus faecium, all isolates	**34**	**11**	3	3		3																74	
- vancomycin-susceptible	**25**	**8**	4	4		4																100	
- vancomycin-resistant (VRE)	**7**	**2**	0	0		0																0	100
- vancomycin-susceptible (vanA+)	**2**	**1**	0	0		0																0	100
Staphyloccocus aureus, all isolates	**17**	**6**				82	82	82	82	82			65	65	94			100				100	100
- methicillin-susceptible	**14**	**5**				100	100	100	100	100			79	79	93			100				100	100
- methicillin-resistant (MRSA)	**3**	**1**				0	0	0	0	0			0	0	100			100				100	100
Enterococcus faecalis, all isolates	**6**	**2**	100	100		100																100	
- vancomycin-susceptible	**6**	**2**	100	100		100																100	
- vancomycin-resistant (VRE)	**0**	**0**																					

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.

Year-Specific Notes:

- Only a limited number of coagulase negative staphylococci isolates were tested for susceptibilities. The vast majority of coagulase-negative staphylococci are susceptible to vancomycin. If you have any questions, please contact the UHN/MSH Department of Microbiology.

Organism-Specific Notes:

° 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.

Princess Margaret Hospital ANTIBIOGRAM
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Respiratory Isolates — % Susceptible

≥80% Susceptible
70-79% Susceptible
≤69% Susceptible

	#	%	Ampicillin	Amoxicillin-Clavulanic acid	Penicillin	Penicillin IV (meningitis)	Penicillin IV (non-meningitis)	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Ceftriaxone	Ceftazidime	Clindamycin	Erythromycin	Doxycycline	Ciprofloxacin	Moxifloxacin	Trimethoprim-Sulfamethoxazole	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid
ALL BACTERIA	**70**	—	14	26				87	92	44			63							62					
ALL GRAM-NEGATIVE BACTERIA	**44**	**100**	16	34				85	95	18			51	84				75		32	88	92	96		
Pseudomonas aeruginosa	**17**	**39**						88	88					94				88			88	94	94		
Haemophilus influenzae^^	**11**	**25**	64																						
Moraxella catarrhalis^	**5**	**11**																							
Escherichia coli	**4**	**9**	0	25				25	100	100			50	50				50		50	75	75	100		
Klebsiella pneumoniae	**3**	**7**	0	100				100	100	100			100	100				100		100	100	100	100		
*Stenotrophomonas maltophilia*ʻ	**3**	**7**																	33	100					
ALL GRAM-POSITIVE BACTERIA	**26**	**100**	12	12	12			88	88	88	77	88	81		80	68				100				100	
Staphyloccocus aureus, all isolates	**20**	**77**						95	95	95	95	95			75	65	95			100				100	100
- methicillin-susceptible	**19**	**73**						100	100	100	100	100			74	68	95			100				100	100
- methicillin-resistant (MRSA)	**1**	**4**						0	0	0	0	0			100	0	100			100				100	100
Streptococcus pneumoniae	**3**	**12**				100	100								100	100			100					100	
Coagulase-negative staphylococci	**2**	**8**						50	50	50	50	50			100	50	100			100				100	100
Viridans group streptococci°	**1**	**4**											100											100	

General Notes:

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- Susceptibility to doxycycline was predicted based on tetracycline susceptibility testing results.

Year-Specific Notes:

- Susceptibility for cefazolin are not available for Gram-negative isolates from non-sterile site specimens for the current year.

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.

° 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.

ʻ *S. maltophilia*: Susceptibility to moxifloxacin was predicted based on levofloxacin susceptibility testing results.

Princess Margaret Hospital ANTIBIOGRAM
All Inpatients and Outpatients
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Skin, Wound and Abscess Isolates — % Susceptible

≥80% Susceptible
70-79% Susceptible
≤69% Susceptible

	#	%	Ampicillin	Amoxicillin-Clavulanic acid	Penicillin	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Ceftriaxone	Ceftazidime	Clindamycin	Erythromycin	Doxycycline	Ciprofloxacin	Moxifloxacin	Trimethoprim-Sulfamethoxazole	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid
ALL BACTERIA	**154**	—	11	22		82	86	70			67							74					
ALL GRAM-NEGATIVE BACTERIA	**61**	**100**	12	39		78	97	57			45	80				83		50	95	92	98		
Pseudomonas aeruginosa	**23**	**38**				91	91					96				91			96	96	96		
Escherichia coli	**14**	**23**	43	71		93	100	100			93	93				64		79	93	86	100		
Klebsiella pneumoniae	**8**	**13**	0	100		88	100	100			100	100				88		88	100	100	100		
Klebsiella oxytoca	**5**	**8**	0	100		100	100	100			100	100				100		80	100	100	100		
Serratia marcescens	**2**	**3**	0	0		0	100	100			0	0				100		100	100	50	100		
ALL GRAM-POSITIVE BACTERIA	**93**	**100**	11	11	5	84	78	78	73	78	81		70	66				91				99	
Staphyloccocus aureus, all isolates	**77**	**83**				88	88	88	88	88			79	74	94			99				100	100
- methicillin-susceptible	**68**	**73**				100	100	100	100	100			82	81	96			100				100	100
- methicillin-resistant (MRSA)	**9**	**10**				0	0	0	0	0			56	22	78			89				100	100
Enterococcus faecalis, all isolates	**5**	**5**	100	100		100																100	
- vancomycin-susceptible	**5**	**5**	100	100		100																100	
- vancomycin-resistant (VRE)	**0**	**0**																					
Group B streptococci**	**3**	**3**			100								33	33								100	
Coagulase-negative staphylococci	**2**	**2**				0	0	0	0	0			0	0	100			100				100	100
Enterococcus faecium, all isolates	**2**	**2**	0	0		0																50	
- vancomycin-susceptible	**1**	**1**	0	0		0																100	
- vancomycin-resistant (VRE)	**1**	**1**	0	0		0																0	
- vancomycin-susceptible (vanA+)	**0**	**0**																					
Viridans group streptococci°	**2**	**2**									100											100	

General Notes:

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- Susceptibility to doxycycline was predicted based on tetracycline susceptibility testing results.

Year-Specific Notes:

- Susceptibility for cefazolin are not available for Gram-negative isolates from non-sterile site specimens for the current year.

Organism-Specific Notes:

** Beta-hemolytic streptococci: Susceptibilty 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.

Prepared by University Health Network/Mount Sinai Hospital Department of Microbiology August 08, 2017

Princess Margaret Hospital ANTIBIOGRAM
All Inpatients and Outpatients
January 1, 2016 - December 31, 2016

Blood Isolates — % Susceptible

≥80% Susceptible
70-79% Susceptible
≤69% Susceptible

	#	%	Ampicillin	Amoxicillin-Clavulanic acid	Penicillin	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Ceftriaxone	Ceftazidime	Clindamycin	Erythromycin	Doxycycline	Ciprofloxacin	Moxifloxacin	Trimethoprim-Sulfamethoxazole	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid
ALL BACTERIA	**490**	—	37	68		78	75	72		5	58							59					
ALL GRAM-NEGATIVE BACTERIA	**350**	**100**	24	67		74	99	93			74	76				80		75	91	91	99		
Escherichia coli	**202**	**58**	35	80		85	100	100		0	88	88				73		72	89	89	100		
Klebsiella pneumoniae	**57**	**16**	0	82		79	100	100		0	89	89				91		84	93	91	100		
Proteus mirabilis	**18**	**5**	78	94		94	100	100		0	94	94				83		83	94	94	100		
Enterobacter cloacae	**14**	**4**	0	0		0	100	93		0	0	0				93		79	93	93	100		
Pseudomonas aeruginosa	**12**	**3**				75	83					83				92			100	100	100		
Klebsiella oxytoca	**12**	**3**	0	83		83	100	100		0	83	83				100		92	92	92	100		
Citrobacter koseri	**8**	**2**	0	0		0	100	100		0	0	0				100		100	100	100	100		
Stenotrophomonas maltophilia‘	**5**	**1**															75	100					
Enterobacter aerogenes	**5**	**1**	0	0		0	100	100		0	0	0				100		100	100	100	100		
ALL GRAM-POSITIVE BACTERIA	**140**	**100**	69	69		86	18	18	18	18	18		12	12				19				97	
Enterococcus faecalis, all isolates	**90**	**64**	100	100		100																100	
- vancomycin-susceptible	**90**	**64**	100	100		100																100	
- vancomycin-resistant (VRE)	**0**	**0**																					
Staphyloccocus aureus, all isolates	**26**	**19**				92	92	92	92	92			66	62	96			100				100	100
- methicillin-susceptible	**24**	**17**				100	100	100	100	100			71	67	96			100				100	100
- methicillin-resistant (MRSA)	**2**	**1**				0	0	0	0	0			0	0	100			100				100	100
Enterococcus faecium, all isolates	**19**	**14**	10	10		10																84	
- vancomycin-susceptible	**16**	**11**	12	12		12																100	
- vancomycin-resistant (VRE)	**3**	**2**	0	0		0																0	100
- vancomycin-susceptible (vanA+)	**0**	**0**																					
Enterococcus species	**3**	**2**	100	100		100																100	

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- Susceptibility to doxycycline was predicted based on tetracycline susceptibility testing results.

Organism-Specific Notes:

“ *S. saprophyticus*: Susceptibility testing is not routinely perfomed. Most urinary tract infections due to this organism respond to nitrofurantoin, trimethoprim/sulfamethoxazole or fluoroquinolones.

‘ *S. maltophilia*: Susceptibility to moxifloxacin was predicted based on levofloxacin susceptibility testing results.

Princess Margaret Hospital ANTIBIOGRAM
All Inpatients and Outpatients
January 1, 2016 - December 31, 2016

All Non-Urine Isolates — % Susceptible

≥80% Susceptible
70-79% Susceptible
≤69% Susceptible

	#	%	Ampicillin	Amoxicillin-Clavulanic acid	Penicillin	Penicillin IV (meningitis)	Penicillin IV (non-meningitis)	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Ceftriaxone	Ceftazidime	Clindamycin	Erythromycin	Doxycycline	Ciprofloxacin	Moxifloxacin	Trimethoprim-Sulfamethoxazole	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid
ALL BACTERIA	**614**	—	16	28				74	81	62			65							64					
ALL GRAM-NEGATIVE BACTERIA	**272**	**100**	10	36				74	98	54			48	72				70		51	90	89	96		
Pseudomonas aeruginosa	**78**	**29**						87	92					88				83			90	95	97		
Escherichia coli	**76**	**28**	21	53				67	100	99			75	75				43		58	82	76	99		
Klebsiella pneumoniae	**37**	**14**	0	97				92	100	100			97	97				95		95	100	97	100		
Stenotrophomonas maltophilia‘	**17**	**6**																	88	100					
Enterobacter cloacae	**15**	**6**	0	0				0	100	93			0	0				100		80	93	93	100		
Haemophilus influenzae^^	**12**	**4**	67																						
Moraxella catarrhalis^	**7**	**3**																							
Klebsiella oxytoca	**6**	**2**	0	100				100	100	100			100	100				100		83	100	100	100		
Serratia marcescens	**5**	**2**	0	0				0	100	100			0	0				100		100	100	80	100		
ALL GRAM-POSITIVE BACTERIA	**342**	**100**	21	21	17			74	68	68	51	68	78		60	56				77				97	
Staphyloccocus aureus, all isolates	**195**	**57**						90	90	90	90	90			78	72	94			99				100	100
- methicillin-susceptible	**176**	**51**						100	100	100	100	100			82	79	95			99				100	100
- methicillin-resistant (MRSA)	**19**	**6**						0	0	0	0	0			37	11	89			95				100	100
Viridans group streptococci°	**81**	**24**			60								98											100	
Enterococcus faecium, all isolates	**37**	**11**	2	2				2																78	
- vancomycin-susceptible	**29**	**8**	3	3				3																100	
- vancomycin-resistant (VRE)	**8**	**2**	0	0				0																0	100
- vancomycin-susceptible (vanA+)	**0**	**0**																							
Enterococcus faecalis, all isolates	**15**	**4**	100	100				100																100	
- vancomycin-susceptible	**15**	**4**	100	100				100																100	
- vancomycin-resistant (VRE)	**0**	**0**																							
Group B streptococci**	**6**	**2**			100										33	33								100	
Streptococcus pneumoniae	**5**	**1**				50	100								80	80			100					100	

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