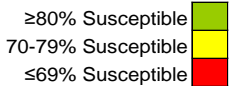


**Toronto General Hospital ANTIBIOGRAM**  
**Intensive Care Units**  
**January 1, 2021 - December 31, 2021**

**Blood Isolates – % 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



<b>ALL BACTERIA</b>	503	—	12	17		41	39	37		29	35							55					
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<b>ALL GRAM-NEGATIVE BACTERIA</b>	91	100	10	39		49	94	80		32	42	46				80		75	95	91	95		
<i>Klebsiella pneumoniae</i>	25	27	0	84		84	96	96		84	84	84				88		88	100	96	100		
<i>Escherichia coli</i>	19	21	38	53		58	100	100		37	58	58				58		58	84	68	84		
<i>Enterobacter cloacae</i>	9	10	0	0		0	89	89		0	0	0				100		78	100	100	100		
<i>Klebsiella aerogenes</i>	9	10	0	0		0	89	78		0	0	0				100		100	100	100	100		
<i>Pseudomonas aeruginosa</i>	8	9				75	75					75				75			88	88	88		
<i>Serratia marcescens</i>	6	7	0	0		0	100	100		0	0	0				100		100	100	100	100		
<i>Stenotrophomonas maltophilia</i>	5	5														100	80						

<b>ALL GRAM-POSITIVE BACTERIA</b>	412	100	13	13	1	39	28	28	26	28	33		45	34				50				98	
Coagulase-negative staphylococci	251	61				20	20	20	20	20			50	35	95			50				100	100
<i>Staphylococcus aureus</i> , all isolates	67	16				88	88	88	88	88			75	66	94			100				100	100
- methicillin-susceptible	59	14				100	100	100	100	100			75	68	97			100				100	100
- methicillin-resistant (MRSA)	8	2				0	0	0	0	0			75	50	75			100				100	100
<i>Enterococcus faecalis</i>	41	10	100	100		100																100	
<i>Enterococcus faecium</i> , all isolates	24	6	21	21		21																79	
- vancomycin-susceptible	19	5	26	26		26																100	
- vancomycin-resistant (VRE)	5	1	0	0		0																0	100
<i>Streptococcus anginosus</i> group <sup>°°</sup>	12	3			0											100						100	
Viridans group streptococci <sup>°</sup>	11	3														91						100	
Group B streptococci <sup>**</sup>	6	1				100							33	33								100	

**General Notes:**

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- 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.
- ICUs include MSICU, CCU, CVICU.

**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:**

- \*\* Beta-hemolytic streptococci: Susceptibility 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.
- ° *S. maltophilia*: Susceptibility to moxifloxacin was predicted based on levofloxacin susceptibility testing results.
- °° *S. anginosus* group: Please note that only a small proportion of these isolates were tested for susceptibilities. Please take this into consideration when interpreting the reported results.

**Toronto General Hospital ANTIBIOGRAM**  
**Intensive Care Units**  
**January 1, 2021 - December 31, 2021**

**Respiratory Isolates – % Susceptible**

	#	%	Antibiotics																							
			Ampicillin	Amoxicillin-Clavulanic acid	Penicillin IV (meningitis)	Penicillin IV (non-meningitis)	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Ceftriaxone	Ceftriaxone (meningitis)	Ceftriaxone (non-meningitis)	Ceftazidime	Clindamycin	Erythromycin	Doxycycline	Ciprofloxacin	Moxifloxacin	Trimethoprim-Sulfamethoxazole	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid
<b>ALL BACTERIA</b>	456	—	4	18			64	89	65			33	51							76						
<b>ALL GRAM-NEGATIVE BACTERIA</b>	297	100	5	27			51	92	54			5	31			49			78	64	92	87	91			
<i>Pseudomonas aeruginosa</i>	81	27					72	75								72			73			85	95	84		
<i>Klebsiella pneumoniae</i>	41	14	0	80			80	98	88			33	80			80			90		90	95	75	88		
<i>Serratia marcescens</i>	23	8	0	0			0	100	100			0	0			0			91		100	100	96	100		
<i>Enterobacter cloacae</i>	22	7	0	0			0	95	91			0	0			0			100		86	100	100	100		
<i>Haemophilus influenzae</i> <sup>^^</sup>	21	7	76																							
<i>Stenotrophomonas maltophilia</i> <sup>†</sup>	20	7																			85	95				
<i>Escherichia coli</i>	19	6	0	42			47	100	100			0	58			58			68		58	89	33	100		
<i>Klebsiella aerogenes</i>	19	6	0	0			0	100	100			0	0			0			100		100	100	100	100		
<i>Klebsiella oxytoca</i>	19	6	0	84			84	100	100			0	84			84			100		100	100	100	100		
<i>Citrobacter koseri</i>	14	5	0	0			0	100	100			0	0			0			100		100	100	100	100		
<b>ALL GRAM-POSITIVE BACTERIA</b>	159	100	1	1			84	84	84	83	84	86				81	72				98				99	
<i>Staphylococcus aureus</i> , all isolates	152	96					88	88	88	88	88					83	75	94			98				100	100
- methicillin-susceptible	133	84					100	100	100	100	100					83	78	95			98				100	100
- methicillin-resistant (MRSA)	19	12					0	0	0	0	0					79	53	84			100				100	100
<i>Streptococcus pneumoniae</i>	7	4			29	29								60	100	57	29				86				100	
<i>Staphylococcus lugdunensis</i>	1	1					100	100	100	100	100					100	100	100			100				100	100

**General Notes:**

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- 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.
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- Susceptibility to doxycycline was predicted based on tetracycline susceptibility testing results.
- ICUs include MSICU, CCU, CVICU.

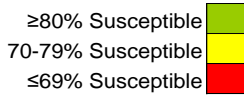
**Organism-Specific Notes:**

- <sup>^^</sup> *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.
- <sup>†</sup> *S. maltophilia*: Susceptibility to moxifloxacin was predicted based on levofloxacin susceptibility testing results.

**Toronto General Hospital ANTIBIOGRAM**  
**Intensive Care Units**  
**January 1, 2021 - December 31, 2021**

**Skin, Wound and Abscess Isolates – % Susceptible**

	#	%	Ampicillin	Amoxicillin-Clavulanic acid	Penicillin	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Ceftriaxone	Ceftazidime	Clindamycin	Erythromycin	Doxycycline	Ciprofloxacin	Trimethoprim-Sulfamethoxazole	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid



<b>ALL BACTERIA</b>	78	—	13	27		55	58	44		27	45						52					
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<b>ALL GRAM-NEGATIVE BACTERIA</b>	37	100	6	35		54	81	51		15	40	59				76	57	86	64	70		
<i>Escherichia coli</i>	10	27	22	50		50	100	100		57	70	70				70	70	90	60	80		
<i>Pseudomonas aeruginosa</i>	10	27				70	50					70				70		90	90	80		
<i>Klebsiella pneumoniae</i>	7	19	0	71		71	71	0		0	71	71				71	86	71	0	0		
<i>Enterobacter cloacae</i>	4	11	0	0		0	100	75		0	0	0				75	75	100	100	100		
<i>Klebsiella oxytoca</i>	4	11	0	75		75	100	100		0	75	75				100	75	75	67	100		

<b>ALL GRAM-POSITIVE BACTERIA</b>	41	100	20	20		56	37	37	37	37	49		33	28			47				90	
<i>Staphylococcus aureus</i>	12	29				100	100	100	100	100			58	50	92		100				100	100
Coagulase-negative staphylococci	10	24				30	30	30	30	30			50	40	90		50				100	100
<i>Enterococcus faecalis</i>	6	15	100	100		100															100	
<i>Enterococcus faecium</i> , all isolates	6	15	0	0		0															67	
- vancomycin-susceptible	4	10	0	0		0															100	
- vancomycin-resistant (VRE)	2	5	0	0		0															0	100
<i>Streptococcus anginosus</i> group <sup>°°</sup>	5	12			0					100											100	

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- ICUs include MSICU, CCU, CVICU.

**Organism-Specific Notes:**

°° *S. anginosus* group: Please note that only a small proportion of these isolates were tested for susceptibilities. Please take this into consideration when interpreting the reported results.

**Toronto General Hospital ANTIBIOGRAM  
Intensive Care Units  
January 1, 2021 - December 31, 2021**

**All Urine Isolates – % Susceptible**

		Ampicillin	Amoxicillin-Clavulanic acid	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Cephalexin	Ceftriaxone	Ceftazidime	Doxycycline	Ciprofloxacin	Trimethoprim-Sulfamethoxazole	Nitrofurantoin	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid
≥80% Susceptible																				
70-79% Susceptible																				
≤69% Susceptible																				
#	%																			

<b>ALL BACTERIA</b>	86	—	34	60	74	68	28		1	34	36		12	78	41	63				
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<b>ALL GRAM-NEGATIVE BACTERIA</b>		#	%	8	47	66	97	39		47	51	70		75	58	51	90	34	75	
<i>Escherichia coli</i>	24	41	0	62	62	96	67		0	62	71	71		71	67	96	88	0	100	
<i>Pseudomonas aeruginosa</i>	14	24			79	93						79		71			79	93	93	
<i>Klebsiella pneumoniae</i>	6	10	0	100	100	100				100	100	100		67	67	33	100			
<i>Proteus mirabilis</i>	5	8	100	100	100	100				100	100	100		80	100	0	100			
<i>Klebsiella aerogenes</i>	3	5	0	0	0	100	100		0	0	0	0		67	100	0	100	100	100	
<i>Klebsiella oxytoca</i>	3	5	0	67	67	100			0	67	67	67		100	67	100	100			

<b>ALL GRAM-POSITIVE BACTERIA</b>		#	%	89	89	93	4	4	4	4	4	4	37	85	4	89				100	
<i>Enterococcus faecalis</i>	23	85	100	100	100								35	96		100				100	
<i>Enterococcus faecium</i>	3	11	33	33	33								33	33		0				100	100
<i>Staphylococcus aureus</i>	1	4			100	100	100	100	100	100			100		100	100				100	100

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