

**Toronto General Hospital ANTIBIOGRAM**  
**Wards other than ICUs/Emergency/Transplant Unit**  
**January 1, 2021 - December 31, 2021**

**Blood Isolates – % Susceptible**

≥80% Susceptible <span style="color: green;">■</span> 70-79% Susceptible <span style="color: yellow;">■</span> ≤69% Susceptible <span style="color: red;">■</span>	#	%	Ampicillin	Amoxicillin-Clavulanic acid	Penicillin	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Ceftriaxone	Ceftazidime	Clindamycin	Erythromycin	Doxycycline	Ciprofloxacin	Trimethoprim-Sulfamethoxazole	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid
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<b>ALL BACTERIA</b>	598	—	12	21		54	59	56		41	53						68					
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<b>ALL GRAM-NEGATIVE BACTERIA</b>	183	100	20	51		65	97	85		38	56	66					78	68	94	92	96	
<i>Escherichia coli</i>	84	46	38	65		74	99	98		52	76	76					68	68	93	89	94	
<i>Klebsiella pneumoniae</i>	34	19	0	76		76	97	97		68	76	76					85	82	97	91	97	
<i>Pseudomonas aeruginosa</i>	23	13				74	87					83					87		87	96	91	
<i>Enterobacter cloacae</i>	8	4	0	0		0	100	100		0	0	0					100	100	100	100	100	
<i>Klebsiella oxytoca</i>	8	4	0	75		75	100	100		12	75	75					100	88	88	88	100	
<i>Klebsiella aerogenes</i>	6	3	0	0		0	100	100		0	0	0					67	83	100	83	100	
<i>Proteus mirabilis</i>	6	3	67	100		100	100	100		33	100	100					67	83	100	100	100	
<i>Serratia marcescens</i>	6	3	0	0		0	100	100		0	0	0					100	100	100	100	100	

<b>ALL GRAM-POSITIVE BACTERIA</b>	415	100	8	8	2	49	43	43	41	43	51		56	40			68					98	
Coagulase-negative staphylococci	255	61				45	45	45	45	45			61	39	88		76					100	100
<i>Staphylococcus aureus</i> , all isolates	63	15				92	92	92	92	92			81	75	97		100					100	100
- methicillin-susceptible	58	14				100	100	100	100	100			79	76	97		100					100	100
- methicillin-resistant (MRSA)	5	1				0	0	0	0	0			100	60	100		100					100	100
Viridans group streptococci°	29	7									93											100	
<i>Enterococcus faecium</i> , all isolates	27	7	12	12		12																85	
- vancomycin-susceptible	23	6	14	14		14																100	
- vancomycin-resistant (VRE)	4	1	0	0		0																0	100
<i>Enterococcus faecalis</i>	24	6	100	100		100																100	
<i>Streptococcus anginosus</i> group°°	9	2			0						100											100	
Group A streptococci**	6	1				100							83	83								100	
<i>Staphylococcus lugdunensis</i>	6	1				100	100	100	100	100			100	100	83		100					100	100

**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.

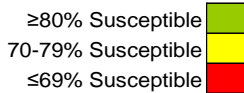
**Organism-Specific Notes:**

- \*\* 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. 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**  
**Wards other than ICUs/Emergency/Transplant Unit**  
**January 1, 2021 - December 31, 2021**

**Respiratory Isolates – % Susceptible**

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



<b>ALL BACTERIA</b>	247	—	6	16	73	87	42		22	42							51					
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ALL GRAM-NEGATIVE BACTERIA	#	%	Ampicillin	Amoxicillin-Clavulanic acid	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Ceftriaxone	Ceftazidime	Clindamycin	Erythromycin	Doxycycline	Ciprofloxacin	Moxifloxacin	Trimethoprim-Sulfamethoxazole	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid
<i>Pseudomonas aeruginosa</i>	93	51		84	82				1	26	69				74		35	89	90	92		
<i>Klebsiella pneumoniae</i>	17	9	0	76	71	100	100		0	76	76				76		71	94	67	100		
<i>Haemophilus influenzae</i> <sup>^^</sup>	16	9	69																			
<i>Escherichia coli</i>	13	7	0	46	62	100	100		17	69	69				77		69	100	100	100		
<i>Stenotrophomonas maltophilia</i> <sup>†</sup>	11	6														100	100					
<i>Enterobacter cloacae</i>	7	4	0	0	0	100	71		0	0	0				86		86	100	100	100		
<i>Klebsiella aerogenes</i>	7	4	0	0	0	86	86		0	0	0				100		100	100	100	100		
<i>Serratia marcescens</i>	6	3	0	0	0	100	100		0	0	0				100		100	100	100	100		

ALL GRAM-POSITIVE BACTERIA	#	%	Ampicillin	Amoxicillin-Clavulanic acid	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Ceftriaxone	Ceftazidime	Clindamycin	Erythromycin	Doxycycline	Ciprofloxacin	Moxifloxacin	Trimethoprim-Sulfamethoxazole	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid	
<i>Staphylococcus aureus</i> , all isolates	57	86		86	86	86	86								70	59	91					100	100
- methicillin-susceptible	49	74		100	100	100	100								71	63	90					100	100
- methicillin-resistant (MRSA)	8	12		0	0	0	0								62	38	100					100	100
<i>Mycobacterium tuberculosis complex</i>	3	5															92						95

**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.
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- 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.

**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

## Wards other than ICUs/Emergency/Transplant Unit

### 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

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

<b>ALL BACTERIA</b>	426	—	9	21	63	69	51	32	45							58							
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<b>ALL GRAM-NEGATIVE BACTERIA</b>	209	100	3	27	65	93	54	14	33	66						76	52	95	93	97			
<i>Pseudomonas aeruginosa</i>	80	38			86	85						88				74		96	99	98			
<i>Escherichia coli</i>	44	21	8	48	61	98	91	20	64	64						61	68	89	77	95			
<i>Klebsiella pneumoniae</i>	23	11	0	91	91	91	78	82	91	91						91	91	96	91	91			
<i>Enterobacter cloacae</i>	21	10	0	0	0	100	90	0	0	0						95	95	100	100	100			
<i>Serratia marcescens</i>	10	5	0	0	0	100	100	0	0	0						90	100	100	100	100			
<i>Klebsiella oxytoca</i>	9	4	0	100	100	100	100	25	100	100						100	89	100	100	100			
<i>Proteus mirabilis</i>	7	3	33	86	100	100	100	0	100	100						86	86	86	75	100			

<b>ALL GRAM-POSITIVE BACTERIA</b>	217	100	14	14	1	62	48	48	47	48	57		53	47			65					92	
<i>Staphylococcus aureus</i> , all isolates	119	55				84	84	84	84	84			79	70	92		100					100	100
- methicillin-susceptible	100	46				100	100	100	100	100			81	75	93		100					100	100
- methicillin-resistant (MRSA)	19	9				0	0	0	0	0			68	42	89		100					100	100
Coagulase-negative staphylococci	28	13				32	32	32	32	32			57	50	82		50					100	100
<i>Enterococcus faecalis</i>	24	11	100	100		100																100	
<i>Enterococcus faecium</i> , all isolates	24	11	25	25		25																75	
- vancomycin-susceptible	18	8	33	33		33																100	
- vancomycin-resistant (VRE)	6	3	0	0		0																0	100
<i>Streptococcus anginosus</i> group <sup>°°</sup>	17	8			0					100												100	
<i>Staphylococcus lugdunensis</i>	10	5				90	90	90	90	90			100	100	89		100					100	100

**General Notes:**

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

**Organism-Specific Notes:**

<sup>°°</sup> *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

## Wards other than ICUs/Emergency/Transplant Unit

### January 1, 2021 - December 31, 2021

#### 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	<span style="display: inline-block; width: 15px; height: 10px; background-color: #90EE90; border: 1px solid black;"></span>																			
70-79% Susceptible	<span style="display: inline-block; width: 15px; height: 10px; background-color: #FFFF00; border: 1px solid black;"></span>																			
≤69% Susceptible	<span style="display: inline-block; width: 15px; height: 10px; background-color: #FF0000; border: 1px solid black;"></span>																			
#	%																			

<b>ALL BACTERIA</b>	936	—	21	55	68	70	60	5	39	42	9	70	46	63						
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ALL GRAM-NEGATIVE BACTERIA	#	%	Ampicillin	Amoxicillin-Clavulanic acid	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Cephalexin	Ceftriaxone	Ceftazidime	Doxycycline	Ciprofloxacin	Trimethoprim-Sulfamethoxazole	Nitrofurantoin	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid
<b>ALL GRAM-NEGATIVE BACTERIA</b>	645	100	50	66	98	84	3	53	58	68	77	64	59	91	58	93					
<i>Escherichia coli</i>	297	46	0	63	72	99	95	4	71	76	76	0	65	60	96	88	49	97			
<i>Klebsiella pneumoniae</i>	118	18	0	76	79	99	93	8	79	82	82	86	77	27	91	29	93				
<i>Pseudomonas aeruginosa</i>	67	10			94	94					94	88			91	100	91				
<i>Proteus mirabilis</i>	37	6	0	86	89	100	100	0	81	89	89	81	81	0	92	75	50				
<i>Enterobacter cloacae</i>	31	5	0	0	0	100	90	0	0	0	0	97	87	55	100	100	100				
<i>Klebsiella oxytoca</i>	20	3	0	80	80	100	100	0	50	80	80	95	85	90	95	0	100				
<i>Klebsiella aerogenes</i>	16	2	0	0	0	100	94	0	0	0	0	75	94	19	100	100	100				
<i>Citrobacter freundii</i>	12	2	0	0	0	100	100	0	0	0	0	100	92	92	92	92	100				
<i>Morganella morganii</i>	9	1	0	0	0	100	100	0	0	0	0	67	78	11	89	100	100				
<i>Citrobacter koseri</i>	8	1	0	0	0	100	100	0	0	0	0	100	100	100	100	100	100				
<i>Serratia marcescens</i>	8	1	0	0	0	100	100	0	0	0	0	88	100	0	100	100	100				
<i>Stenotrophomonas maltophilia</i> <sup>†</sup>	5	1												100	0						

ALL GRAM-POSITIVE BACTERIA	#	%	Ampicillin	Amoxicillin-Clavulanic acid	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Cephalexin	Ceftriaxone	Ceftazidime	Doxycycline	Ciprofloxacin	Trimethoprim-Sulfamethoxazole	Nitrofurantoin	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid
<b>ALL GRAM-POSITIVE BACTERIA</b>	291	100	66	66	74	7	7	7	7	7	7	30	57	8	73					91	97
<i>Enterococcus faecalis</i>	193	66	98	98	98							27	85		97					100	100
<i>Enterococcus faecium</i> , all isolates	71	24	7	7	7							20	3		3					70	96
- vancomycin-susceptible	50	17	10	10	10							20	4		0					100	95
- vancomycin-resistant (VRE)	21	7	0	0	0							19	0		10					0	100
<i>Staphylococcus aureus</i> , all isolates	23	8			87	87	87	87	87	87			87		96	96				100	100
- methicillin-susceptible	20	7			100	100	100	100	100	100			95		100	95				100	100
- methicillin-resistant (MRSA)	3	1			0	0	0	0	0	0			33		67	100				100	100
<i>Staphylococcus lugdunensis</i>	4	1			50	50	50	50	50	50			100		100	100				100	100
Coagulase-negative staphylococci	2	1			50	50	50	50	50				50		50	100				100	100
<i>Enterococcus gallinarum</i>	2	1	100	100	100								50	50		100				0	

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

#### Organism-Specific Notes:

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