

Toronto Western Hospital ANTIBIOGRAM
Wards other than ICUs/Emergency
January 1, 2023 - December 31, 2023

Blood Isolates – % Susceptible

					Ampicillin	Amoxicillin-Clavulanic acid	Penicillin	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
#	%																												
ALL BACTERIA	885	—	13	22					63	65	63		54	64										81					
ALL GRAM-NEGATIVE BACTERIA	200	100	31	67					76	100	92		53	72			79					77		75	90	91	98		
<i>Escherichia coli</i>	116	58	53	75					78	100	100		63	82			82					67		73	85	86	97		
<i>Klebsiella pneumoniae</i>	36	18	0	97					94	100	100		92	97			97					89		92	100	100	100		
<i>Pseudomonas aeruginosa</i>	14	7							100	100							100					85			85	100	100		
<i>Enterobacter cloacae</i>	8	4	0	0					0	100	100		0	0			0					88		88	88	88	100		
<i>Proteus mirabilis</i>	7	4	0	100					100	100	100		0	100			100					100		86	100	100	100		
<i>Klebsiella oxytoca</i>	5	3	0	100					100	100	100		0	100			100					100		100	100	100	100		
<i>Serratia marcescens</i>	3	2	0	0					0	100	100		0	0			0					100		100	100	100	100		
<i>Providencia stuartii</i>	3	2	0	0					0	100	100		0	0			0					67		100	100	100	100		
<i>Morganella morganii</i>	2	1	0	0					0	100	100		0	0			0					100		100	100	100	100		
<i>Citrobacter freundii</i>	2	1	0	0					0	100	100		0	0			0					100		100	100	100	100		
<i>Moraxella catarrhalis</i> [^]	2	1																											
<i>Citrobacter braakii</i>	2	1	0	0					0	100	100		0	0			0					100		100	100	100	100		
ALL GRAM-POSITIVE BACTERIA	685	100	8	8	4				59	55	55	51	55	62				74	51					83				100	
Coagulase-negative staphylococci	497	73							58	58	58	58	58					82	50	92				88				100	100
<i>Staphylococcus aureus</i> , all isolates	70	10							87	87	87	87	87					87	78	95				100				100	100
- methicillin-susceptible	61	9							100	100	100	100	100					85	78	97				100				100	100
- methicillin-resistant (MRSA)	9	1							0	0	0	0	0					100	78	78				100				100	100
Viridans group streptococci [*]	32	5												100															100
<i>Enterococcus faecalis</i> , all isolates	32	5	97	97					94																				100
<i>Streptococcus pneumoniae</i>	20	3													95	100				71			100						100
<i>Enterococcus faecium</i> , all isolates	9	1	11	11					11																				100
Group A streptococci ^{**}	14	2			100														93	71									100
Group G streptococci ^{**}	7	1			100														57	57									100
Group B streptococci ^{**}	4	1			100														25	0									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
- > 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:

- [^] *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
- ^{**} 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.

Toronto Western Hospital ANTIBIOGRAM Wards other than ICUs/Emergency January 1, 2023 - December 31, 2023

Respiratory Isolates – % Susceptible

		<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>≥80% Susceptible ■</p> <p>70-79% Susceptible ■</p> <p>≤69% Susceptible ■</p> </div> </div>																								
#	%	Ampicillin	Amoxicillin-Clavulanic acid	Penicillin	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
ALL BACTERIA	63	—					75	74	32		29	30									40					
ALL GRAM-NEGATIVE BACTERIA	40	100					74	71	5						73				83		13	69	89	84		
<i>Pseudomonas aeruginosa</i>	35	88					80	71							83				86		69	91	85			
<i>Stenotrophomonas maltophilia</i>	2	5																	100	100						
<i>Citrobacter koseri</i>	2	5	0	0			0	50	50		0	0			0				100		100	50	50	50		
<i>Enterobacter cloacae</i>	1	3	0	0			0	100	100		0	0			0				100		100	100	100	100		
ALL GRAM-POSITIVE BACTERIA	23	100					78	78	78	78	78	78			57	48					91				91	
<i>Staphylococcus aureus</i> , all isolates	19	83					89	89	89	89	89				58	53	95				100				100	100
- methicillin-susceptible	17	74					100	100	100	100	100				59	59	100				100				100	100
- methicillin-resistant (MRSA)	2	9					0	0	0	0	0				50	0	50				100				100	100
<i>Mycobacterium tuberculosis</i> complex	2	9																								
Coagulase-negative staphylococci	1	4					100	100	100	100	100				100	100	100				100				100	100
<i>Streptococcus pneumoniae</i>	1	4			0	0							0	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.

Organism-Specific Notes:

¹ *S. maltophilia*: Susceptibility to moxifloxacin was predicted based on levofloxacin susceptibility testing results.

Toronto Western Hospital ANTIBIOGRAM
Wards other than ICUs/Emergency
January 1, 2023 - December 31, 2023

All Urine Isolates – % Susceptible

	#	%	Antibiotics																
			Ampicillin	Amoxicillin-Clavulanic acid	Penicillin	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Cephalexin	Ceftriaxone	Ceftazidime	Doxycycline	Ciprofloxacin	Trimethoprim-Sulfamethoxazole	Nitrofurantoin	Gentamicin	Tobramycin

ALL BACTERIA	1154	–	24	64	77	76	64	6	2	52	24	76	56	69								
---------------------	------	---	----	----	----	----	----	---	---	----	----	----	----	----	--	--	--	--	--	--	--	--

ALL GRAM-NEGATIVE BACTERIA	#	%	Ampicillin	Amoxicillin-Clavulanic acid	Penicillin	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Cephalexin	Ceftriaxone	Ceftazidime	Doxycycline	Ciprofloxacin	Trimethoprim-Sulfamethoxazole	Nitrofurantoin	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid
<i>Escherichia coli</i>	467	54	9	70	78	100	96		5	0	81	81	11	64	74	96	91	35	92			
<i>Klebsiella pneumoniae</i>	132	15	0	85	86	100	100		12		89	89	100	84	88	30	97	60	100			
<i>Pseudomonas aeruginosa</i>	87	10			95	94						97		94			97	99	98			
<i>Proteus mirabilis</i>	56	6	20	95	98	100	100		25		98	98		89	82	0	89	25	100			
<i>Klebsiella oxytoca</i>	31	4	0	87	97	100					100	100		97	97	87	100					
<i>Enterobacter cloacae</i>	27	3	0	0	0	100	89		0	0	0	0	0		93	85	48	100	100	100		
<i>Morganella morganii</i>	23	3	0	0	0	100	100		0	0	0	0	0		74	83	4	91	100	100		
<i>Citrobacter koseri</i>	16	2	0	0	6	100	100		0	0	0	0	0	0	100	100	81	100	100	100		
<i>Serratia marcescens</i>	6	1	0	0	0	100	100		0	0	0	0	0		100	100	0	100	100	100		
<i>Providencia stuartii</i>	6	1	0	0	0	100	100		0	0	0	0	0		67	100	0	100	100	100		
<i>Providencia rettgeri</i>	4	0	0	0	0	100	100		0	0	0	0	0		100	100	25	100	100	100		
<i>Citrobacter freundii</i>	3	0	0	0	0	100	100		0	0	0	0	0		67	100	100	100	100	100		
<i>Citrobacter amalonaticus</i>	2	0	0	0	0	100	100		0	0	0	0	0		100	100	50	100	100	100		
<i>Stenotrophomonas maltophilia</i>	1	0													100	0						
<i>Citrobacter braakii</i>	1	0	0	0	0	100	100		0	0	0	0	0		100	100	100	100	100	100		

ALL GRAM-POSITIVE BACTERIA	#	%	Ampicillin	Amoxicillin-Clavulanic acid	Penicillin	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Cephalexin	Ceftriaxone	Ceftazidime	Doxycycline	Ciprofloxacin	Trimethoprim-Sulfamethoxazole	Nitrofurantoin	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid	
<i>Enterococcus faecalis</i> , all isolates	215	74	100	100	100										28	91		99				100	100
<i>Enterococcus faecium</i> , all isolates	49	17	10	10	10										12	10		8				78	100
- vancomycin-susceptible	38	13	13	13	13										16	13		8				100	100
- vancomycin-resistant (VRE)	11	4	0	0	0										0	0		9				0	100
<i>Staphylococcus aureus</i> , all isolates	26	9			77	77	77	77	73	73					84	77	100	96				100	100
- methicillin-susceptible	20	7			100	100	100	100	95	95					84	100	100	95				100	100
- methicillin-resistant (MRSA)	6	2			0	0	0	0	0	0					83		100	100				100	100
<i>Enterococcus species</i>	1	0	100	100	100										0	100		0				100	
<i>Enterococcus casseliflavus</i>	1	0	100	100	100										100	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.

Organism-Specific Notes:

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

Toronto Western Hospital ANTIBIOGRAM
Wards other than ICUs/Emergency
January 1, 2023 - December 31, 2023

All Specimens – % Susceptible

#	%	Ampicillin	Amoxicillin-Clavulanic acid	Penicillin	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	Vancocycin	Linezolid
ALL BACTERIA	2047	—	24	46			73	74	65		35	56									63					
ALL GRAM-NEGATIVE BACTERIA	1151	100	17	55			74	99	83		30	62			76				76		68	93	85	97		
<i>Escherichia coli</i>	560	49	32	70			78	100	99		39	81			81				64		74	91	75	96		
<i>Pseudomonas aeruginosa</i>	175	15					92	92							94				90		92	97	96			
<i>Klebsiella pneumoniae</i>	161	14	0	88			88	100	100		70	91			91				84		87	97	91	100		
<i>Proteus mirabilis</i>	70	6	18	96			99	100	100		25	99			99				89		84	91	81	100		
<i>Enterobacter cloacae</i>	62	5	0	0			0	100	92		0	0			0				89		87	97	95	100		
<i>Klebsiella oxytoca</i>	38	3	0	89			97	100	100		0	100			100				97		97	100	100	100		
<i>Morganella morganii</i>	27	2	0	0			0	100	100		0	0			0				78		89	93	100	100		
<i>Citrobacter koseri</i>	22	2	0	0			5	95	95		0	0			0				100		100	95	95	95		
<i>Serratia marcescens</i>	18	2	0	0			0	100	100		0	0			0				94		100	100	100	100		
<i>Citrobacter freundii</i>	7	1	0	0			0	100	100		0	0			0				86		100	100	100	100		
<i>Providencia stuartii</i>	7	1	0	0			0	100	100		0	0			0				57		100	100	100	100		
<i>Moraxella catarrhalis</i> [^]	4	0																								
ALL GRAM-POSITIVE BACTERIA	896	100	34	34	4		72	42	42	38	42	49			50	39					56				99	
<i>Staphylococcus aureus</i> , all isolates	299	33					86	86	86	86	85				81	70	95				100				100	100
- methicillin-susceptible	258	29					99	99	99	99	98				81	72	96				100				100	100
- methicillin-resistant (MRSA)	41	5					5	5	5	5	5				82	54	87				97				100	100
<i>Enterococcus faecalis</i> , all isolates	261	29	99	99			99																		100	
Coagulase-negative staphylococci	171	19					49	49	49	49	49				76	48	89				85				100	100
<i>Enterococcus faecium</i> , all isolates	60	7	10	10			10																		82	
- vancomycin-susceptible	49	5	12	12			12																		100	
- vancomycin-resistant (VRE)	11	1	0	0			0																		0	100
Viridans group streptococci *	42	5										100														100
<i>Streptococcus pneumoniae</i>	24	3			0	0							92	100	100	71			100						100	
Group A streptococci**	18	2			100											94	71								100	
Group B streptococci**	12	1			100											55	27								100	
Group G streptococci**	9	1			100											44	44								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:

- > All specimens exclude surveillance samples.

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.
- ** 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.