

# Toronto Western Hospital ANTIBIOGRAM

## Wards other than ICUs/Emergency

### January 1, 2022 - December 31, 2022

#### All Specimen 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	Daptomycin



<b>ALL BACTERIA</b>	2087	—	21	41				67	69	60		32	50									63						
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ALL GRAM-NEGATIVE BACTERIA	1049	100	14	53				72	99	80		24	59		75				79	69	93	86	96					
<i>Escherichia coli</i>	497	47	25	73			79	100	99		36	83			83				69	78	92	76	95					
<i>Pseudomonas aeruginosa</i>	180	17					89	92							93				87		85	94	95					
<i>Klebsiella pneumoniae</i>	117	11	0	85			87	100	100		41	88			88				84	89	98	93	100					
<i>Proteus mirabilis</i>	78	7	25	91			95	100	100		25	95			95				83	86	95	87	93					
<i>Enterobacter cloacae</i>	61	6	0	0			0	98	97		0	0			0				97	92	98	98	100					
<i>Morganella morganii</i>	22	2	0	0			5	100	100		0	0			0				71	81	90	100	100					
<i>Klebsiella oxytoca</i>	20	2	0	90			90	100	100		18	90			90				100	100	100	100	100					
<i>Serratia marcescens</i>	14	1	0	0			0	100	100		0	0			0				100	100	100	100	100					
<i>Klebsiella aerogenes</i>	14	1	0	0			0	100	100		0	0			0				100	100	100	100	100					
<i>Citrobacter freundii</i>	11	1	0	0			0	100	91		0	0			0				100	100	100	100	100					
<i>Citrobacter koseri</i>	10	1	0	0			0	100	100		0	0			0				100	100	100	100	100					
<i>Haemophilus influenzae</i> ^^	6	1	67																									
<i>Providencia rettgeri</i>	5	0	0	0			0	100	100		0	0			0				100	100	100	100	100					

ALL GRAM-POSITIVE BACTERIA	1038	100	28	28	6			61	40	40	34	40	41			50	35			57								96		
Coagulase-negative staphylococci	464	45						36	36	36	36	36				66	39	92		73								100	100	
<i>Enterococcus faecalis</i>	225	22	100	100			100																					100		
<i>Staphylococcus aureus</i> , all isolates	218	21					87	87	87	87	86					80	68	96		99								100	100	
- methicillin-susceptible	191	18					99	99	99	99	98					81	73	98		99								100	100	
- methicillin-resistant (MRSA)	27	3					0	0	0	0	0					69	31	85		100								100	100	
<i>Enterococcus faecium</i> , all isolates	38	4	15	15			15																					74		
- vancomycin-susceptible	28	3	21	21			21																					100		
- vancomycin-resistant (VRE)	10	1	0	0			0																					0	100	100
Viridans group streptococci *	31	3			58								90															100		
<i>Staphylococcus lugdunensis</i>	24	2					92	92	92	92	92					96	92	100		100								100	100	
Group B streptococci**	16	2			100											69	62											100		
<i>Streptococcus anginosus</i> group **	15	1			100								100															100		
Group A streptococci**	12	1			100											83	62											100		
<i>Streptococcus pneumoniae</i>	8	1												88	100													100		
Group G streptococci**	7	1			100											86	86											100		
<i>Mycobacterium tuberculosis</i> complex	6	1																												

#### 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:

- ^^ *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.
- \*\* 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 Western Hospital ANTIBIOGRAM**  
**Wards other than ICUs/Emergency**  
**January 1, 2022 - December 31, 2022**

**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	Ceftriaxone (meningitis)	Ceftriaxone (non-meningitis)	Ceftazidime	Clindamycin	Erythromycin	Doxycycline	Ciprofloxacin	Moxifloxacin	Trimethoprim-Sulfamethoxazole	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid

<b>ALL BACTERIA</b>	558	—	16	25		49	54	52		39	46									85					
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<b>ALL GRAM-NEGATIVE BACTERIA</b>	139	100	27	61		69	99	91		40	63			70				79		78	96	94	97		
<i>Escherichia coli</i>	71	51	46	73		76	100	100		56	77			77				65		77	92	89	94		
<i>Klebsiella pneumoniae</i>	17	12	0	94		94	100	100		71	94			94				88		94	100	100	100		
<i>Pseudomonas aeruginosa</i>	10	7				90	90							90				100			100	100	100		
<i>Proteus mirabilis</i>	10	7	22	100		100	100	100		22	100			100				90		78	100	100	100		
<i>Enterobacter cloacae</i>	8	6	0	0		0	100	100		0	0			0				100		88	100	100	100		
<i>Serratia marcescens</i>	6	4	0	0		0	100	100		0	0			0				100		100	100	100	100		
<i>Klebsiella oxytoca</i>	5	4	0	100		100	100	100		20	100			100				100		100	100	100	100		

<b>ALL GRAM-POSITIVE BACTERIA</b>	419	100	13	13	5	43	39	39	32	39	40			61	45					88					
Coagulase-negative staphylococci	294	70				30	30	30	30	30				65	45	95				95				100	100
<i>Staphylococcus aureus</i> , all isolates	56	13				84	84	84	84	84				77	64	96				100				100	100
- methicillin-susceptible	47	11				100	100	100	100	100				79	70	100				100				100	100
- methicillin-resistant (MRSA)	9	2				0	0	0	0	0				67	33	78				100				100	100
<i>Enterococcus faecalis</i>	22	5	100	100		100																		100	
Viridans group streptococci*	22	5			59						91													100	
<i>Streptococcus pneumoniae</i>	8	2										88	100							62				100	
Group B streptococci**	6	1			100									83	83									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.

## Toronto Western Hospital ANTIBIOGRAM Wards other than ICUs/Emergency January 1, 2022 - December 31, 2022

### Respiratory 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>	50	—	14	16	76	80	32	24	46							46						
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<b>ALL GRAM-NEGATIVE BACTERIA</b>	34	100	21	24	77	83	12			32	79					80	24	70	72	88		
<i>Pseudomonas aeruginosa</i>	19	56			79	74					84					84		61	68	95		
<i>Haemophilus influenzae</i> <sup>^^</sup>	6	18	100																			
<i>Moraxella catarrhalis</i> <sup>^</sup>	3	9																				

<b>ALL GRAM-POSITIVE BACTERIA</b>	16	100			75	75	75	75	75	75		75	75			81						
<i>Staphylococcus aureus</i> , all isolates	13	81			92	92	92	92	92			92	92	93		100					100	100
- methicillin-susceptible	12	75			100	100	100	100	100			100	100	92		100					100	100
- methicillin-resistant (MRSA)	1	6			0	0	0	0	0			0	0	100		100					100	100
<i>Mycobacterium tuberculosis complex</i>	3	19																				

#### General Notes:

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

#### Organism-Specific Notes:

- <sup>^</sup> *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.
- <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.

# Toronto Western Hospital ANTIBIOGRAM

## Wards other than ICUs/Emergency

### January 1, 2022 - December 31, 2022

#### Urine Isolates – % Susceptible

≥80% Susceptible <span style="color: green; font-weight: bold;">■</span> 70-79% Susceptible <span style="color: yellow; font-weight: bold;">■</span> ≤69% Susceptible <span style="color: red; font-weight: bold;">■</span>																					
#	%	Ampicillin	Amoxicillin-Clavulanic acid	Piperacillin-Tazobactam	Meropenem	Ertapenem	Cloxacillin	Cefazolin	Cephalixin	Ceftriaxone	Ceftazidime	Doxycycline	Ciprofloxacin	Trimethoprim-Sulfamethoxazole	Nitrofurantoin	Gentamicin	Tobramycin	Amikacin	Vancomycin	Linezolid	Daptomycin

<b>ALL BACTERIA</b>	<b>1022</b>	—	23	64	77	77	66	8	2	51	77	56	71								
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<b>ALL GRAM-NEGATIVE BACTERIA</b>	<b>776</b>	<b>100</b>	4	59	74	99	85			64	77	76	71	65	92	57	92				
<i>Escherichia coli</i>	426	55	5	73	79	100	98			82	82	67	77	97	92	37	92				
<i>Pseudomonas aeruginosa</i>	103	13			89	94					92	86			84	96	95				
<i>Klebsiella pneumoniae</i>	96	12	0	86	86	100	100			87	87	86	89	48	97	67	100				
<i>Proteus mirabilis</i>	61	8	20	93	97	100	100		0	97	97	83	89	2	93	50	67				
<i>Enterobacter cloacae</i>	38	5	0	0	0	97	95		0	0	0	95	92	55	97	97	100				
<i>Morganella morganii</i>	13	2	0	0	0	100	100		0	0	0	77	77	0	92	100	100				
<i>Citrobacter freundii</i>	10	1	0	0	0	100	89		0	0	0	100	100	90	100	90	90				
<i>Klebsiella oxytoca</i>	8	1	0	88	88	100	100			88	88	100	100	88	100	100	100				
<i>Klebsiella aerogenes</i>	7	1	0	0	0	100	100		0	0	0	100	100	0	100	100	100				
<i>Citrobacter koseri</i>	7	1	0	0	0	100	100		0	0	0	100	100	86	100	100	100				

<b>ALL GRAM-POSITIVE BACTERIA</b>	<b>246</b>	<b>100</b>	80	80	87	7	7	7	7	7	8	34	78	9	88			97	98	
<i>Enterococcus faecalis</i>	191	78	100	100	100							27	95		100			100	100	
<i>Enterococcus faecium</i> , all isolates	29	12	21	21	21							34	17		13			79	94	
- vancomycin-susceptible	23	9	26	26	26							43	22		17			100	92	
- vancomycin-resistant (VRE)	6	2	0	0	0							0	0		0			0	100	100
<i>Staphylococcus aureus</i> , all isolates	18	7			83	83	83	83	83	83		100		100	94			100	100	
- methicillin-susceptible	15	6			100	100	100	100	100	100		100		100	93			100	100	
- methicillin-resistant (MRSA)	3	1			0	0	0	0	0	0		100		100	100			100	100	

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