

# McLAREN PORT HURON 2025 ANTIBIOGRAM DRUG THERAPY POCKET GUIDE



## ANTIMICROBIAL SUSCEPTIBILITIES FROM JANUARY 1, 2024 – DECEMBER 31, 2024

For questions, please contact the  
McLaren Port Huron Pharmacy at (810) 985-2644



DOING WHAT'S BEST.®

1221 Pine Grove Ave. | Port Huron, Michigan 48060  
mclaren.org/porthuron

Number of Isolates	GRAM NEGATIVE BACTERIA										GRAM POSITIVE BACTERIA									
	<i>Acinetobacter baumannii</i>	<i>Citrobacter freundii</i>	<i>Enterobacter cloacae</i>	<i>Escherichia Coli</i>	<i>Klebsiella oxytoca</i>	<i>Klebsiella pneumoniae</i>	<i>Morganella morganii</i>	<i>Proteus mirabilis</i>	<i>Pseudomonas aeruginosa</i>	<i>Serratia marcescens</i>	<i>Enterococcus faecalis</i>	<i>Enterococcus faecium</i>	Vancomycin Resistant <i>Enterococcus</i> species	MRSA	<i>Staphylococcus aureus</i> (MSSA)	<i>Staphylococcus epidermidis</i>	<i>Staphylococcus hominis</i>	<i>Staphylococcus lugdunensis</i>	<i>Streptococcus agalactiae</i> (Group B)	<i>Streptococcus pyogenes</i> (Group A)
Amikacin	32	58	188	1624	134	442	66	340	387	114	~400	~80	55-82	~550	~650	~200	33	36	~100	72
Amoxicillin-Clavulanate				* = 150										96	111					
Amoxicillin-Subactam	75	44	8	77*	69	77	12	87						100	40	41	88			
Ampicillin		28		56				78			98	16	34		99	40	41	88		100
Acitromycin																				
Aztreonam		74	73	88	92	84	84	92	83	85					60*	39*	46			88
Cefazolin															100	40	41	88		
Cefepime	78	96	88	89	95	85	100	95	89	99					100*	37*	37			100
Cefotaxime		10		95	97	92	78	96												
Ceftazidime	81	70	76	89	95	85	86	95	91	78										100
Ceftroxime	78	67	63	88	93	85	84	94		87				100*	37*	37				100
Ciprofloxacin	78	91	89	80	97	89	79	66	87	98	69	11		22	84	67	54			72
Clindamycin														65	71	58	65	50		86
Daptomycin											100	100	100	100	100	100	100	100		100
Ertapenem		98	86	99	100	98	100	98												
Erythromycin																				
Gentamicin	96	96	92	89	95	91	87	92	86	99	31			19	57	34	46			86
Gent Synergy																				
Levofloxacin	81	91	95	81	97	96	89	72	86	100	82	92	92	94	97	90	81			
Meropenem	81	100	99	100	100	100	99	100	93	100	76	12	23	23	89	67	54			100
Nitrofurantoin											97	95	93	100	100	100	100	100		100
Oxacillin											99	71	85							83
Penicillin																				
Piperacillin-Tazobactam		91	82	98	95	94	100	98	90	88	98	20	40							100
Rifampin											55	10	31	98	98	100	100	100		
Tetracyclines	84	79	85	77	85	79	55	92	99	92	27	20	2	75	94	78	52	100		91
Tobramycin	96	93	90	91	96	89	90	92	99	92										
Trimethoprim - Sulfamethoxazole	78	83	84	76	93	85	89	76		98				80	96	59	58	100		100
Vancomycin											92	48		100	100	100	100	100		100

Jan 1, 2024 - Dec 31, 2024  
Numbers Represent % Susceptibility  
Inpatient + Outpatient  
(1st Isolate of a species per patient)

Blue highlighting indicates organisms that crossed above 80 % susceptible compared to 2023 data. Red highlighting indicates organisms that crossed below 80% susceptible compared to 2023 data

## Antibiotic dosing based on normal renal function

(pharmacist will renally adjust as needed according to renal dosing policy)

Antimicrobials	Usual Dose per indication					
Acyclovir IV	HSV Suppression = 2.5 mg/kg q8h		HSV Treatment = 5 mg/kg q8h		Herpes Zoster or Encephalitis = 10 mg/kg q8h	
Acyclovir PO	HSV Suppression = 400 mg q12h		HSV Treatment = 400 mg three times daily		Herpes Zoster or Encephalitis = 800 mg five times daily	
Amoxicillin PO	Pneumonia = 1 gm q8h			Systemic Infection = 500 mg q8h		
Amoxicillin/clavulanate PO	875 mg q12h					
Ampicillin IV	Systemic Infection = 2 gm q6h			Bloodstream/Endocarditis/CNS Infection = 2 gm q4h		
Ampicillin/sulbactam IV	Systemic Infection = 3 gm q6h			Acinetobacter Infection = Contact ID physician/ pharmacy for dosing assistance. Sulbactam is the active component. Higher than typical doses may be indicated for this pathogen.		
Aztreonam IV*	Systemic Infection = 2 gm q8h			CNS Infection = 2 gm q6h		
Cefazolin IV	Systemic Infection = 2 gm q8h			Cystitis (lower urinary tract infection) = 1 gm q8h		
Cefdinir PO	300 mg q12h					
Cefepime IV*	Systemic Infection = 2 gm q8h			Cystitis (lower urinary tract infection) = 1 gm q8h		
Cefoxitin IV	2 gm q6h					
Ceftazidime IV*	2 gm q8h					
Ceftazidime/avibactam IV	2.5 gm q8h					
Ceftriaxone IV	Systemic Infection = 2 gm daily			Cystitis (lower urinary tract infection) = 1 gm daily		
Ceftolozane/tazobactam IV	Pulmonary Infections/Sepsis = 3 gm q8h			Non-pulmonary Infections = 1.5 gm q8h		
Cephalexin PO	Systemic Infection = 500 mg q6h			Cystitis (lower urinary tract infection) = 500 mg q12h		
Ciprofloxacin IV	Systemic Infection = 400 mg q8h			Cystitis (lower urinary tract infection) = 400 mg q12h		
Ciprofloxacin PO	Systemic Infection = 750 mg q12h			Cystitis (lower urinary tract infection) = 500 mg q12h		
Daptomycin IV	Skin & Soft Tissue/ Urinary Tract Infection = 4 mg/kg q24h		Bacteremia/ Endocarditis = 6 mg/kg q24h		VRE Bacteremia/Endocarditis = 10 mg/kg q24h	
Ertapenem IV	1 gm q24h					
Fluconazole IV/PO	Oropharyngeal Thrush/ Urinary Tract Infection = 200 mg q24h		Invasive <i>Candida</i> Infection = 800 mg x1, followed by 400 mg q24h		<i>Candida glabrata</i> Infection = 800 mg q24h	
Ganciclovir IV	CMV Induction = 5 mg/kg q12h			CMV Maintenance = 5 mg/kg q24h		
Levofloxacin IV/PO	Systemic Infection = 750 mg q24h					
Meropenem IV*	Systemic Infection = 500 mg q6h					
Osetamivir PO	Treatment = 75 mg q12h			Prophylaxis = 75 mg q24h		
Penicillin G IV	Standard/ Maximum Dose/ Endocarditis/ Necrotizing Fasciitis/ Toxic Shock Syndrome = 4 million units q4h			Reduced Dose (Highly Penicillin-Sensitive Organisms; MIC ≤ 0.12 mcg/mL)/ Endocarditis = 2 million units q4h		
Piperacillin/tazobactam IV*	3.375 gm q8h					
Sulfamethoxazole-trimethoprim IV (weight-based dosing is based on the trimethoprim component)	Systemic Infection (Non-Urinary) = 5 mg/kg q12h			PCP Pneumonia/ Nocardia/ Meningitis = 5 mg/kg q8h		
Sulfamethoxazole-trimethoprim PO	Systemic Infection = 1-2 DS tablets q12h			Cystitis (lower urinary tract infection) = 1 DS tablet q12h		
Valacyclovir PO	1 <sup>st</sup> Episode HSV = 1 gm q12h	Recurrent HSV = 500 mg q12h	Recurrent HSV – Immunocompromised = 1 gm q12h	HSV Suppression = 500 mg to 1000 mg	HSV Suppression – Immunocompromised = 500 mg q12h	Shingles/ VZV = 1 gm q8h

\*Extended Interval Dosing utilized, excluding ER, OR, Pediatrics and First doses

### Antibiotics Utilizing Extended Infusion Dosing:

- Aztreonam (3 hour infusion)
- Cefepime (4 hour infusion)
- Cefazidime (4 hour infusion)
- Meropenem (3 hour infusion)
- Piperacillin/Tazobactam (4 hour infusion)

### Prescribing Considerations:

- Aztreonam reserved for patient with severe  $\beta$ -lactam allergy (alternative: Cefepime)

### Inappropriate Use of Vancomycin:

- Routine surgical prophylaxis
- Treatment of a single positive blood culture for coagulase negative staphylococci
- Eradication of MRSA colonization

### Fluoroquinolone use should be avoided in the following:

- Patients with increased risk of aortic aneurysm, rupture or dissection
- Patients with history of tendonitis or tendon ruptures
- Elderly patients due to increased side effects and hepatotoxicity
- Certain uncomplicated infections (i.e. UTI due to increased E. Coli Resistance)

### Beta-lactam Antibiotic Cross-Allergy Chart

	(*) = AVOID (cross-reactivity/likely/identical R1 or R2 side chain) (A) = CAUTION (cross-reaction less likely/similar R1 or R2 side chain)					
	Pen			1 <sup>st</sup> Gen	2 <sup>nd</sup> Gen	3 <sup>rd</sup> Gen
Amoxicillin						
Ampicillin	X					
Penicillin	X	X				
Piperacillin	X	X	X			
Cefazolin						
Cephalexin			X			
Cefoxitin			X			
Cefuroxime						
Cefdinir						
Cefotaxime						
Ceftazidime						
Ceftriaxone						
Cefepime						
Aztreonam						
Ertapenem						
Meropenem						