PACIFIC DIAGNOSTIC LABORATORIES

PDL (Outreach Lab Only)

Antimicrobial Susceptibility Profile January – December 2021

Percent Susceptible¹

	AVG. SAMPLE SIZE	AMPICILLIN	AMP / SUL	NAFCIL / OXACIL	PIP / TAZO	TETRACYCLINE	CEFAZOLIN	CEFTRIAXONE	CEFTAZIDIME	CEFEPIME	CIPROFLOXACIN	LEVOFLOXACIN	GENTAMICIN	IMIPENEM	ERTAPENEM	TRIMETH / SULFA	NITROFURAN (3)	CLINDAMYCIN	ERYTHROMYCIN	VANCOMYCIN	LINEZOLID	RIFAMPIN (4)	MEROPENEM
ORGANISM ¹				Z							O	1							ш				ļ
Escherichia coli (all)	10632	62	68		97		91	93	93	99	85	85	92	100	100	78	97						99
Escherichia coli ESBL7 (all)	724	0	0		91		0	0	0	85	34	34	67	99	100	52	91						100
Escherichia coli (Urines)	10338	62	68		97		91	93	93	99	85	85	92	100	100	78	97						
Escherichia coli ESBL7 (Urines)	702	0	0		91		0	0	0	84	34	34	68	99	100	52	91						
Klebsiella pneumoniae	1528		87		96		95	96	96	99	97	98	98	100	100	91	22						100
Klebsiella oxytoca	332		69		94		74	90	94	94	93	99	99	99	96	95	80						91
Klebsiella aerogenes (formerly known as Enterobacter aerogenes)	275		0		88			86	87	99	97	97	99	64	98	99	10						100
Klebsiella sp. ESBL ⁷	87		0		69		0	0	0	66	46	77	76	98	87	43	41						
Pseudomonas aeruginosa	953				89				93	93	90	85	94	94									88
Stenotrophomonas maltophilia	79											84				91							
Enterobacter cloacae complex	336				80			77	80	98	97	98	98	90	97	91	32						100
Proteus mirabilis	785	80	90		100		95	96	97	99	91	93	96	13	100	84							96
Citrobacter freundii complex	199				86			84	85	98	98	97	96	96	100	91	93						100
Citrobacter koseri (diversus)	314				98		98	99	99	100	99	99	99	99	100	99	72						100
Serratia marcescens	129				96			95	98	99	97	95	100	76	98	98							100
Staphylococcus aureus	3474			74		91	(2)				73	74	97			95	100	82	60	100	100	99	
Staphylococcus aureus (MSSA)	2578			100		93	(2)				90	91	98			96	98	83	74	100	100	100	
Staphylococcus aureus (MRSA)	896			0		85	(2)				22	23	95			91	100	80	17	100	100	99	
Coagulase Negative Staph.	37			72		97	(2)				88	88 ⁶	91			89	93	88	72	100	100	100	
Enterococcus spp.	1487	99									90	91 ⁵					97			98	100		
Enterococcus faecalis	1426	100									91	93 ⁵					99			99	99		
Enterococcus faecalis (VRE)	1	100									100	100 ⁵					100			0	100		
Enterococcus faecium	61	69									47	48 ⁵					38			75	98		
Enterococcus faecium (VRE)	14	7									7	7					16			0	100		
Streptococcus pneumoniae	44			100				95				100				41		100	72	100			
≥-5% difference compared to 2020	≥-10	% differ	ence c	ompare	d to 202	20		≥+5%	differen	ice com	pared to	2020											

Footnotes:

- Profiles include data from disk diffusion, automated testing, and gradient diffusion MIC. Intermediate results have been interpreted as resistant to this tabulation. All isolates were not tested against each antibiotic in the profile.
- 2. Refer to oxacillin results. Oxacillin susceptible staphylococci can be considered susceptible to:
 - β-lactam combination agents (e.g. piperacillintazobactam)
 - Oral cephems (e.g., cefdinir, cephalexin, cefpodoxime, cefuroxime)
 - Parenteral cephems including cephalosporins I, II, III, and IV (e.g., cefazolin, Cefepime, cefotaxime, cefotetan, ceftriaxone, cefuroxime, ceftaroline)
 - Carbapenems (e.g. Ertapenem, Imipenem, Meropenem)

Oxacillin-resistant strains may not respond to betalactam antibiotics such as penicillins, cephalosporins, and carbapenems except Ceftaroline. (CLSI M100, 31th ed, 2021)

- Data apply only to organisms isolated from the urinary tract.
- Rifampin should not be used as a sole agent for antimicrobial therapy.
- Fluoroquinolones are generally not an appropriate therapy against enterococcus infections from sites other than urine.
- Staphylococcus isolates may develop resistance during prolonged therapy with quinolones. Therefore, isolates that are initially susceptible may become resistant within 3-4 days after initiation of therapy. (CLSI M100, 31th ed, 2021)
- 7. ESBL rate

	2019	2020	2021
E. coli	6.6%	7.1%	6.8%
Klebsiella sp.	6.1%	6.8%	4.7%

PACIFIC DIAGNOSTIC LABORATORIES SANTA BARBARA, CA

ANTIBIOTIC SUSCEPTIBILITY PROFILES 2021

PDL Out Patients only

DEPARTMENT OF MICROBIOLOGY

MONICA R. PHILLIPS, MD Medical Director (805) 569-7367

WILLIAM XIE, Ph.D. Microbiology Specialist (805) 324-9426

ANDREA HORVATH Microbiology Lab Manager (805) 324-9813