

PACIFIC DIAGNOSTIC LABORATORIES
PDC (Outreach Lab Only)
Antimicrobial Susceptibility Profile June 2023 – June 2024
Percent Susceptible¹

ORGANISM ¹	SAMPLE SIZE	AMPICILLIN	AMP / SUL	NAFCL / OXACIL (2)	PIP / TAZO	DOXYCYCLINE	CEFALZOLIN (2)	CEFTRIAXONE	CEFTAZIDIME	CEFEPIME	CIPROFLOXACIN	LEVOFLOXACIN	GENTAMICIN	IMIPENEM	ERTAPENEM	TRIMETH / SULFA	NITROFURAN (3)	CLINDAMYCIN	ERYTHROMYCIN	VANCOMYCIN	LINEZOLID	RIFAMPIN (4)	MEROPENEM*	
<i>Escherichia coli</i> (all)	12772	58	66		96		86	91	91	100	80	74	91	100	100	76								97
<i>Escherichia coli</i> ESBL ⁷ (all)	1049	(7)	(7)		(7)		(7)	(7)	(7)	(7)	22	12	73	100	98	52								97
<i>Escherichia coli</i> (Urines)	11439	58	67		96		89	91	91	100	80	74	91	100	100	76	98							
<i>Escherichia coli</i> ESBL ⁷ (Urines)	1001	(7)	(7)		(7)		(7)	(7)	(7)	(7)	22	12	73	100	98	52	93							
<i>Klebsiella pneumoniae</i>	1997	R	83		90		84	92	92	100	88	85	94	99	99	87	25							94
<i>Klebsiella oxytoca</i>	365	R	71		90			91	92	100	93	94	96	100	100	90	83							100
<i>Klebsiella aerogenes</i> (formerly known as <i>Enterobacter aerogenes</i>)	286	R	R				R	R	R	99	97	95	99	57	95	98	16							84
<i>Klebsiella sp.</i> ESBL ⁷	191	(7)	(7)		35		(7)	(7)	(7)	(7)	17	16	44	96	91	16	20							87
<i>Pseudomonas aeruginosa</i>	1199	R	R		85		R	R	91	82	89	81	95	94	R	R								94
<i>Stenotrophomonas maltophilia</i>	89	R	R				R	R	R	R		80	R	R	R	98								
<i>Enterobacter cloacae</i> complex	387	R	R		80		R	R	R	95	94	92	99	91	88	90	44							94
<i>Proteus mirabilis</i>	987	83	90		99		86	97	97	99	87	87	95	R	99	84	R							100
<i>Citrobacter freundii</i> complex	257	R	R		87		R	86	87	99	92	89	97	97	97	87	95							100
<i>Citrobacter koseri</i> (<i>diversus</i>)	328	R			96			100	100	99	99	99	100	100	100	99	86							100
<i>Serratia marcescens</i>	59	R	R		84		R	91	98	98	90	86	100	74	100	99	R							100
<i>Staphylococcus aureus</i>	4159			72		98	(2)				72 ⁶	73 ⁶	96			92	100	79	57	100	100	100		
<i>Staphylococcus aureus</i> (MSSA)	3004			100		99	(2)				91 ⁶	92 ⁶	97			95		79	71	100	100	100		
<i>Staphylococcus aureus</i> (MRSA) ⁹	1155			R		96	(2)				22 ⁶	22 ⁶	92			85		78	19	99	99	98		
<i>Coagulase Negative (CN) Staph.</i> (all)	359			62		89	(2)				78 ⁶	78 ⁶	96			76	97	79	53	100	100	98		
Staph Epidermidis (CN Staph.)	212			52		83	(2)				72 ⁶	72 ⁶	95			64	99	76	40	100	100	98		
<i>Enterococcus spp.</i> (all)	1830	98									90 ⁵	92 ⁵					97			98	100			
<i>Enterococcus faecalis</i>	1758	100									92 ⁵	94 ⁵					99			99	100			
<i>Enterococcus faecium</i>	72	50									40 ⁵	42 ⁵					32			71	100			
<i>Streptococcus pneumoniae</i> ⁸	100			100				94				97				66		85	62	100				
≥-5% difference compared to 2023	≥-10% difference compared to 2023		≥+5% difference compared to 2023					“R”= intrinsically resistant to the antibiotics. Ref: CLSI M100 2024.																

Footnotes:

1. 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., piperacillin/tazobactam)
 - Oral cepheims (e.g., cefdinir, cephalexin, cefpodoxime, cefuroxime)
 - Parenteral cepheims, including cephalosporins I, II, III, and IV (e.g., cefazolin, Cefepime, cefotaxime, cefotetan, ceftriaxone, cefuroxime, ceftazoline)
 - Carbapenems (e.g., Ertapenem, Imipenem, Meropenem)Oxacillin-resistant strains may not respond to beta-lactam antibiotics such as penicillins, cephalosporins, and carbapenems. (CLSI M100, 34thED, 2024)
3. Data apply only to organisms isolated from the urinary tract.
4. Rifampin should not be used as a sole agent for antimicrobial therapy. (CLSI M100, 34thED, 2024)
5. Fluoroquinolones are generally not an appropriate therapy against enterococcus infections from sites other than urine. (CLSI M100, 34thED, 2024)
6. Staphylococcus isolates may develop resistance during prolonged therapy with quinolones. Therefore, isolates that are initially susceptible may become resistant within 3 to 4 days after initiation of therapy. (CLSI M100, 34thED, 2024)

7. PDL ESBL rate

	2021	2022	2023	2024
<i>E. coli</i>	6.8%	7.6%	8.1%	8.2%
<i>Klebsiella</i> sp.	4.7%	5.7%	5.8%	7.7%

ESBLs are enzymes that inactivate most penicillin, cephalosporins, and aztreonam. (IDSA guideline 2024)

8. In 2024, 100 *Streptococcus pneumoniae* samples were tested with Penicillin G. susceptibility rate is 96%

9. MRSA rate

2021	2022	2023	2024
25.8%	28.2%	27.6%	27.8%

10. Fosfomycin susceptibility test is only available for *E. coli* and *Enterococcus faecalis* from urine sources. (CLSI M100, 34thED, 2024). The Fosfomycin/*E.coli* susceptibility rate is below.

	2023	2024
<i>E. coli</i> (all)	99%	100%
<i>E. coli</i> ESBL	98%	98%

**PACIFIC DIAGNOSTIC LABORATORIES
SANTA BARBARA, CA**

**ANTIBIOTIC SUSCEPTIBILITY PROFILES
2024**

PDL Outpatients only

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