Percentage of susceptible Organisms Isolated From All Specimen, University Hospital, 3 hospitals, JAN - DEC 2017

Gram negative

Organism	TOTAL ISOLATES	BETA - LACTAMS										
		PENICILLIN	PENICILLIN BY MIC	AMPICILLIN	AMOXICILLIN/ CLAVULANIC ACID	AMPICILLIN / SULBACTAM	PIPERACILLIN / TAZOBACTAM	CEFAZOLIN (A)	CEFAZOLIN (U)	CEFUROXIME SODIUM (parenteral)	CEFUROXIME SODIUM (Oral)	CEFOPERAZONE / SULBACTAM [a]
Acinetobacter calcoaceticus-baumannii complex	2036					51.3 (1149)	36.9 (2017)					
Acinetobacter spp.	866					20.8 (740)	24.6 (853)					
Aeromonas hydrophila	87						92.5 (53)					
Burkholderia cepacia complex	83											
Burkholderia mallei	-											
Burkholderia pseudomallei	63				97.6[e] (41)							
Citrobacter freundii	134						80.9 (94)					
Enterobacter aerogenes	111						74.3 (74)					
Enterobacter cloacae	467						77.6 (419)					84 (181)
Enterobacter spp.	720			4 (705)	8.4 (706)	12.3 (130)	80.1 (418)	10.3 (155)	10.5[u] (38)		48.2 (299)	70.7 (140)
Escherichia coli (all isolates)	6187			14.2 (6068)	66.6 (6063)	34.2 (2260)	92.3 (4805)	59.2 (2214)			61.4 (1277)	89.4 (2190)
(Urine)	3975			13.6 (3905)	66.2 (3900)	33.7 (1387)	92.8 (3188)		59.7[u] (1664)		63.2 (768)	91.5 (1550)
(Urine-inpatient)	1021				56.7 (992)				[u]			
(Urine-outpatient)	726			9.7 (691)	50.4 (691)	35.3 (646)	92 (675)		[u]			
Haemophilus influenzae (all isolates)	218			60.4 (207)	94.1 (205)	96.4 (111)						
(age 0-5 years old)	64			69.4 (62)	98.4 (61)	97.9 (47)						
(age > 5 years old)	159			57.3 (150)	92.6 (149)	95.5 (67)						
(Sterile sites) [b]	-											
(Non-sterile sites) [c]	214			60.1 (203)	94 (201)	96.3 (109)						
Klebsiella oxytoca	91			1.1 (90)	87.8 (90)		90.9 (55)		[u]			
Klebsiella pneumoniae (all isolates)	4018				64.9 (3897)	48 (1600)	73 (3131)	60.9 (1183)	43.6[u] (413)		53.6 (845)	71.4 (1344)
(ICU)	536				52.6 (498)	43.8 (260)	65.3 (458)	49.3 (150)	[u]		29.8 (47)	64.7 (232)
(inpatient)	1491				58.2 (1449)	48.4 (852)	71.8 (1379)	51 (445)	41.1[u] (141)		46.9 (81)	68.5 (597)
(outpatient)	448				74.5 (435)	66 (409)	84.2 (424)		[u]			
Morganella morganii	348					11.8 (110)	94.5 (220)					92.3 (65)
Proteus mirabilis	1003			51.5 (988)	85.3 (983)	75.5 (331)	98.7 (690)		83.5[u] (272)		84 (213)	99.2 (241)
Proteus vulgaris	146				69.2 (143)		100 (89)					100 (40)
Providencia rettgeri	99						96.4 (56)					
Providencia stuartii	40						94.9 (39)					
Providencia spp.	-								[u]			
Pseudomonas aeruginosa	2872						83.5 (2838)					
Salmonella, Non-typhoidal	525			41.1 (285)								
Serratia marcescens	125						100 (81)					

Organism	BETA - LACTAMS									CARBAPENEMS			POLY MYXINS
	CEFOTAXIME	CEFOTAXIME BY MIC	CEFTAZIDIME	CEFTAZIDIME BY MIC	CEFTRIAXONE	CEFTRIAXONE BY MIC	CEFEPIME	OXACILLIN	CEFOXITIN	ERTAPENEM	IMIPENEM	MEROPENEM	COLISTIN BY MIC
Acinetobacter calcoaceticus-baumannii complex	9.7 (942)		37.9 (2022)		25.2 (381)		45.8 (993)				31.5 (1655)	33.2 (1824)	[e]
Acinetobacter spp.	33.3 (150)		23.4 (860)		43.5 (69)		18.4 (754)				19.3 (653)	17.9 (803)	[e]
Aeromonas hydrophila	83.7 (86)		94.2 (69)		88.5 (52)		94.7 (38)		14.3 (49)		81.8 (44)	95.9 (49)	
Burkholderia cepacia complex			91.6 (83)									79.7 (69)	
Burkholderia mallei													
Burkholderia pseudomallei													
Citrobacter freundii	68.5 (130)		72.9 (129)		73.6 (91)		83.9 (56)				90.4 (73)	90.6 (96)	
Enterobacter aerogenes	68.2 (110)		73.6 (110)		68.5 (92)		72.9 (70)				98.4 (63)	100 (75)	[WT]
Enterobacter cloacae	60.6 (459)		66.7 (460)		63.9 (413)		70.9 (254)				94.1 (323)	93.5 (418)	88.7[WT] (62)
Enterobacter spp.	64.1 (710)		71.9 (711)		65.8 (407)		74.7 (281)		13.8 (392)		93.3 (312)	94.5 (422)	
Escherichia coli (all isolates)	58.7 (6070)		72.2 (6066)		59.6 (4847)		59.7 (2656)		88.2 (4679)		98.2 (3628)	97.7 (4839)	[WT]
(Urine)	58.8 (3907)		72.6 (3902)		59.1 (3203)		57.8 (1646)		88.4 (3193)		98.8 (2367)	98.6 (3190)	[WT]
(Urine-inpatient)													
(Urine-outpatient)	58.1 (692)		70.8 (692)		58.1 (675)		60.8 (674)		86.8 (675)		99.6 (485)	99.9 (675)	
Haemophilus influenzae (all isolates)	96.8 (93)												
(age 0-5 years old)													
(age > 5 years old)	96.4 (84)												
(Sterile sites) [b]													
(Non-sterile sites) [c]	96.6 (89)												
Klebsiella oxytoca	81.1 (90)		86.7 (90)		90.6 (53)		94.4 (36)		100 (51)		100 (39)	94.5 (55)	
Klebsiella pneumoniae (all isolates)	62.1 (3900)		66.4 (3897)		65.1 (3048)		63.9 (1902)		80.3 (2963)		88.4 (2397)	86.9 (3185)	[WT]
(ICU)	49.8 (498)		56.7 (496)		52.8 (409)		57 (251)		72.2 (403)		77.3 (361)	76.1 (489)	[WT]
(inpatient)	56.9 (1447)		61.8 (1448)		59 (1329)		62.8 (874)		75.1 (1319)		85 (1057)	84.7 (1390)	[WT]
(outpatient)	74.7 (435)		78.6 (435)		78.1 (420)		78.5 (419)		86.4 (420)		95.3 (319)	94.1 (425)	[WT]
Morganella morganii	83.6 (341)		91.2 (341)		88.7 (231)		93.6 (156)		56.3 (231)		71.3 (171)	97.3 (221)	
Proteus mirabilis	87.6 (989)		97.1 (989)		89.2 (744)		89 (471)		96.7 (731)		86.7 (566)	99.9 (690)	
Proteus vulgaris	90.2 (143)		95.2 (145)		94.8 (97)		100 (50)		87.6 (97)		80.8 (73)	100 (88)	
Providencia rettgeri	90.8 (98)		93.9 (98)		89.8 (59)		87.8 (41)		83.1 (59)		79.6 (49)	96.4 (56)	
Providencia stuartii	79.5 (39)		84.6 (39)		87.2 (39)		93.8 (32)		94.9 (39)			94.9 (39)	
Providencia spp.													
Pseudomonas aeruginosa			83.9 (2840)				82.3 (1549)				75.8 (2000)	78.2 (2259)	[e]
Salmonella, Non-typhoidal	91.8 (282)		92.1 (101)		86.5 (170)								
Serratia marcescens	94.4 (124)		99.2 (124)		98.9 (91)		98.6 (73)				98.5 (65)	100 (81)	

Organism	QUINOLONES						AMINOGLYCOSIDES			
	NALIDIXIC ACID	CIPROFLOXACIN	CIPROFLOXACIN BY MIC	LEVOFLOXACIN	NORFLOXACIN	OFLOXACIN	AMIKACIN	GENTAMICIN	GENTAMICIN 120 µg	NETILMICIN
Acinetobacter calcoaceticus-baumannii complex		37.1 (2029)		46.1 (1539)			56.2 (2004)	44.6 (2020)		50.8[e] (382)
Acinetobacter spp.		23.1 (860)		24.7 (829)			42.8 (856)	36.1 (853)		59[e] (61)
Aeromonas hydrophila		87.4 (87)		92.1 (38)			100 (69)	97 (67)		
Burkholderia cepacia complex				[e]						
Burkholderia mallei										
Burkholderia pseudomallei										
Citrobacter freundii	[u]	76.2 (130)		70.2 (57)	[u]		97.7 (130)	82.2 (129)		94.2 (52)
Enterobacter aerogenes	[u]	81.8 (110)		92.9 (70)	[u]		100 (110)	91.7 (108)		97.9 (48)
Enterobacter cloacae	[u]	77.2 (460)		77.2 (254)	53.8[u] (119)		93.3 (460)	79.7 (459)		97.4 (189)
Enterobacter spp.	[u]	82.4 (712)		85.8 (282)	76.1[u] (67)	90.9 (44)	98.6 (713)	85.1 (711)		96 (349)
Escherichia coli (all isolates)		44.5 (6063)		43.7 (2681)		38.7 (848)	98.8 (6070)	64.1 (6050)		96.2 (2930)
(Urine)	[u]	40.5 (3900)		39.8 (1650)	41.8[u] (3485)	37.5 (698)	98.7 (3906)	63.6 (3886)		96.1 (2062)
(Urine-inpatient)	[u]				[u]		98.6 (991)			
(Urine-outpatient)	[u]	39.3 (689)		41.1 (674)	40.7[u] (663)		98.4 (692)	62.7 (687)		90 (30)
Haemophilus influenzae (all isolates)		99.3 (140)		100 (77)						
(age 0-5 years old)		100 (57)								
(age > 5 years old)		98.8 (86)		100 (73)						
(Sterile sites) [b]										
(Non-sterile sites) [c]		99.3 (138)		100 (75)						
Klebsiella oxytoca	[u]	88.9 (90)		97.2 (36)	[u]		98.9 (90)	93.3 (89)		100 (31)
Klebsiella pneumoniae (all isolates)	[u]	64.9 (3898)		72.2 (1927)	55.3[u] (854)	55.6 (270)	94.1 (3899)	81.2 (3881)		91.1 (1717)
(ICU)	[u]	58.4 (495)		67.1 (258)	47.7[u] (44)		87.8 (498)	75.8 (496)		83.9 (199)
(inpatient)	[u]	60.3 (1448)		68.8 (877)	49.2[u] (309)	41.2 (34)	89.6 (1450)	77.3 (1438)		85.3 (523)
(outpatient)	[u]	73.6 (435)		78.9 (421)	55[u] (131)		94.9 (435)	87.9 (430)		
Morganella morganii	[u]	78 (341)		85.4 (157)	78.4[u] (125)	67.9 (53)	99.1 (341)	82.4 (340)		91.9 (135)
Proteus mirabilis	[u]	75.2 (989)		77.3 (471)	73.8[u] (385)	72.3 (101)	99.7 (989)	80.9 (980)		89.9 (417)
Proteus vulgaris	[u]	88.2 (144)		92.2 (51)	87.5[u] (40)		100 (144)	91 (144)		96 (75)
Providencia rettgeri	[u]	85.6 (97)		90.5 (42)	[u]		99 (98)	92.9 (98)		95 (40)
Providencia stuartii	[u]	76.9 (39)		78.1 (32)	[u]		94.9 (39)			
Providencia spp.	[u]				[u]					
Pseudomonas aeruginosa		83.7 (2844)		81.6 (2217)	53.1[u] (175)		89.5 (2839)	84 (2167)		89.6 (670)
Salmonella, Non-typhoidal		61.6 (505)		[e]		95.7[e] (210)				
Serratia marcescens	[u]	100[u] (124)		98.6 (73)	[u]		99.2 (124)	100 (124)		100 (39)

Organism	GLYCOPEPTIDES			MISCELLANEOUS								
	VANCOMYCIN	VANCOMYCIN BY MIC	TEICOPLANIN	FOSFOMYCIN	CLINDAMYCIN	CLINDAMYCIN BY MIC	ERYTHROMYCIN	ERYTHROMYCIN BY MIC	NITROFURANTOIN	CHLORAMPHENICOL	CO-TRIMOXAZOLE	TETRACYCLINE
Acinetobacter calcoaceticus-baumannii complex											51 (936)	23.3[u] (236)
Acinetobacter spp.											53.8 (158)	57.1[u] (56)
Aeromonas hydrophila											85.1 (87)	
Burkholderia cepacia complex										[e]	93.3 (75)	
Burkholderia mallei												[e]
Burkholderia pseudomallei											98.3[e] (60)	[e]
Citrobacter freundii									[u]		75.2 (129)	
Enterobacter aerogenes									[u]		85.5 (110)	
Enterobacter cloacae									[u]		72.4 (457)	
Enterobacter spp.									[u]		75.6 (706)	
Escherichia coli (all isolates)											41.1 (6041)	
(Urine)				98.1[u] (528)					[u]		39.9 (3889)	
(Urine-inpatient)				[u]					[u]			
(Urine-outpatient)				99.3[u] (151)					[u]		42.8 (691)	
Haemophilus influenzae (all isolates)											41.9 (210)	
(age 0-5 years old)											39.7 (63)	
(age > 5 years old)											42.1 (152)	
(Sterile sites) [b]												
(Non-sterile sites) [c]											41.7 (206)	
Klebsiella oxytoca									[u]		84.4 (90)	
Klebsiella pneumoniae (all isolates)									[u]		60.8 (3879)	
(ICU)									[u]		53.8 (493)	
(inpatient)									[u]		56.8 (1440)	
(outpatient)									[u]		71.7 (434)	
Morganella morganii											65.6 (340)	
Proteus mirabilis											52.6 (987)	
Proteus vulgaris											80.6 (144)	
Providencia rettgeri											81.2 (96)	
Providencia stuartii											84.6 (39)	
Providencia spp.									[u]			
Pseudomonas aeruginosa												
Salmonella, Non-typhoidal											81.9 (476)	
Serratia marcescens											95.1 (123)	

Percentage of susceptible Organisms Isolated From All Specimen, University Hospital, 3 hospitals, JAN - DEC 2017

	Organism	TOTAL ISOLATES	BETA - LACTAMS																				CARBAPENEMS			POLY MYXINS	QUINOLONES						AMINOGLYCOSIDES				GLYCOPEPTIDES			MISCELLANEOUS								
			PENICILLIN	PENICILLIN BY MIC	AMPICILLIN	AMOXICILLIN/ CLAVULANIC ACID	AMPICILLIN/ SULBACTAM	PIPERACILLIN / TAZOBACTAM	CEFAZOLIN (A)	CEFAZOLIN (U)	CEFUROXIME SODIUM (parenteral)	CEFUROXIME SODIUM (Oral)	CEFOPERAZONE / SULBACTAM [a]	CEFOTAXIME	CEFOTAXIME BY MIC	CEFTAZIDIME	CEFTAZIDIME BY MIC	CEFTRIAXONE	CEFTRIAXONE BY MIC	CEFEPIME	OXACILLIN	CEFOXITIN	ERTAPENEM	IMPENEM	MEROPENEM	COLISTIN BY MIC [a]	NALIDIXIC ACID	CIPROFLOXACIN	CIPROFLOXACIN BY MIC	LEVOFLOXACIN	NORFLOXACIN	OFLOXACIN	AMIKACIN	GENTAMICIN	GENTAMICIN 120 µg	NETILMICIN [a]	VANCOMYCIN	VANCOMYCIN BY MIC	TEICOPLANIN	FOSFOMYCIN	CLINDAMYCIN	CLINDAMYCIN BY MIC	ERYTHROMYCIN	ERYTHROMYCIN BY MIC	NITROFURANTOIN	CHLORAMPHENICOL	CO-TRIMOXAZOLE	TETRACYCLINE [a]
Gram negative	*Shigella* spp.	-																																													
	Stenotrophomonas maltophilia	1050																												88.5 (1026)															[e]	84.1 (1030)	
	Vibrio cholerae (all serotypes)	-																																												
	Vibrio cholerae non O1, non O139	-																																												
	Vibrio parahaemolyticus	107							[e]	[e]				89.8 (98)														91.4 (105)					99 (96)												98.1 (105)	
	Vibrio spp.	144							[e]	[e]				91.5 (130)														92.3 (142)					99.1 (117)												96.4 (139)	
Gram positive	*Enterococcus faecalis*	1211	68.9 (717)		95 (1170)																							30.6 [u] (49)	[u]	38.4 [u] (354)	33.4 [u] (485)				59.1 [h] (1088)		98 (1089)		100 (483)	93.5 [u] (278)			10.5 (95)		[u]	60 (95)		8.9 [u] (336)
	Enterococcus faecium	779	12.8 (483)		12.1 (735)																							[u]	[u]	7.3 [u] (245)	4.4 [u] (362)				75.4 [h] (703)		91 (659)		91.5 (260)				7.4 (54)		[u]	98.1 (54)		11 [u] (209)
	Enterococcus spp.	878	50.7 (765)		63.3 (731)																							[u]	[u]	32.4 [u] (420)	39 [u] (41)				74.7 [h] (722)		92.5 (790)		100 (79)				11.7 (77)		66.9 [u] (314)	77.3 (75)		12.7 [wt] (386)
	Staphylococcus aureus (all isolates)	2359	11.3 (1300)																		80.2 [f] (2202)						86 (278)		86.6 (276)	78.7 [u] (47)	83.5 (587)		86.5 (2001)					[e]		77.7 (2291)		74.1 (2294)		[u]	93.4 (271)	97.4 (2326)	62.9 (601)
	(MRSA)	459	0 (210)																		0 [f] (459)						24.4 (45)		22.2 (45)	[u]	0 (91)		33.2 (398)					[e]		15.6 (450)		10.2 (450)		[u]	88.6 (44)	91.2 (457)	63.4 (101)
	(MSSA)	1808	12.8 (984)																		99.6 [f] (1808)						97.5 (118)		98.3 (115)	90.9 [u] (55)	97.9 (380)		98.1 (1522)					[e]		91 (1763)		87.9 (1764)		[u]	93 (114)	98.8 (1791)	62.4 (386)
	(ICU)	204	7.1 (99)																		70.9 [f] (196)									[u]			73.3 (165)					[e]		71.4 (199)		67.8 (199)		[u]	98 (203)	58.9 (56)
	(inpatient)	769	9.3 (269)																		70.4 [f] (750)						77.5 (40)		80 (35)	[u]	64.5 (76)		76.5 (600)					[e]		67.9 (754)		63 (755)		[u]	100 (34)	98.2 (764)	66.2 (195)
	(outpatient)	319	2.9 (34)																		83.4 [f] (308)									[u]			90.4 (313)					[e]		82.5 (302)		75.7 (301)		[u]		98.7 (315)	
	Staphylococcus, coagulase negative	2081	10.8 (1014)																		35.6 [f] (1830)						58.2 (239)		59.1 (230)	49 [u] (196)	56.2 (64)		66.2 (1766)					[e]		42.7 (1878)		33.1 (1880)		[u]	89.7 (224)	68.2 (2060)	52.9 (516)
	Staphylococcus, coagulase negative (blood)	887	11 (319)																		37 [f] (782)						62.6 (99)		63.5 (96)		31.6 (263)		67.5 (744)					[e]		43.7 (875)		33.3 (877)			89.4 (94)	69.9 (874)	53.6 (222)
	Streptococcus agalactiae	199	99.4 (168)											100 (124)				98.4 (62)																			100 (195)				81.8 (110)		83.6 (140)			99 (103)		
	Streptococcus, β-hemolytic not Group A,B	94	100 (84)											100 (44)																							100 (87)				90.8 (65)		86.5 (89)			94.8 (58)		
	Streptococcus pyogenes	182	100 (160)											100 (120)																							100 (167)				90.4 (146)		89.9 (179)			96.2 (79)		
	Streptococcus pneumoniae (all isolates)	210	33.3 [d] (30)			[e]					[e]	[e]																		100 (52)			97.2 (36)				100 (174)				66.9 (163)		56.4 (204)			84.1 (132)	48.6 (148)	15.4 (39)
	(age 0-5 years old)	78	[d]			[e]					[e]	[e]																									100 (69)				57.1 (56)		47.9 (73)			85.9 (64)	43.1 (51)	
	(age > 5 years old)	134	[d]			[e]					[e]	[e]																		100 (43)							100 (107)				72.2 (108)		60.9 (133)			82.9 (70)	51 (98)	
	(Sterile sites) [b]	33	[d]			[e]					[e]	[e]																															71.9 (32)					
	(Non-sterile sites) [c]	181	[d]			[e]					[e]	[e]																		100 (44)							100 (149)				63.4 (142)		54 (176)			82.9 (117)	46.2 (130)	16.1 (31)
	(Meningitis: by E-test)	-		[e]											[e]					[e]	[e]																											
	(Nonmeningitis: by E-test)	-		[e]		[e]									[e]					[e]	[e]																											

[a] : No CLSI Interpretive Criteria. Interprete according to cefoperazone/sulbactam in *Enterobacteriacae*

[b] : Blood, Pleural Fluid

[c] : Sputum, Ear, Sinus

[d] : Interprete according to oxacillin susceptibility test

[e] : MIC Interpretive Criteria

[f] : Interprete according to cefoxitin susceptibility test

[h] : High-Level Aminoglycoside

[u] : Urine, Urine Catheter, Urine Clean- Voided

[WT] : Wild-type