

Percentage of Susceptible Organisms Isolated From All Specimen, 92 hospitals, Jan - Dec 2019

Organism	TOTAL ISOLATES	BETA - LACTAMS																					CARBAPENEMS		POLY MYXINS	QUINOLONES		AMINOGLYCOSIDES			GLYCOPEPTIDES		MISCELLANEOUS						
		PENICILLIN	PENICILLIN BY MIC	AMPCILLIN	AMOXICILIN / CLAVULANIC ACID	AMPCILLIN / SULBACTAM	PIPERACILLIN / TAZOBACTAM	CEFALOSOLIN (A)	CEFAZOLIN (U)	CEFUROXIME SODIUM (parenteral)	CEFUROXIME SODIUM (oral)	CEFOPERAZONE / SULBACTAM	CEFOTAXIME	CEFTAZIDIME	CEFTRIAXONE	CEFEPIME	DROACILLIN	DEFOFITIN	ERTAPENEM	MERICAPENEM	MEROPENEM	COLISTIN BY MIC	CIPROFLOXACIN	LEVOFLOXACIN	AMIKACIN	GENTAMICIN	GENTAMICIN 80 µg	VANCOMYCIN	TEICOPLANIN	FUSIDICIN	CLINDAMYCIN	ERTHRAMYCIN	NETROFRANTON (U)	CHLORAMPHENICOL	ICI-TRIMOXAZOLE	TETRACYCLINE			
																																					ERYTHROMYCIN	TETRACYCLINE	
<i>Acinetobacter calcoaceticus-baumannii</i> complex	58,506			R	28.3 (11172)	28.3 (44718)							8	28.8 (26377)	28.3 (49249)	29.3 (27920)	28.8 (14415)			R	29.8 (4408)	30.3 (47862)	97.3 (17875)	31.3 (46157)	33.5 (26440)	49.4 (45388)	39.6 (39389)						R	41.5 (36056)	17.2 (256)				
(ICU)	12,171			R	24.1 (1558)	18.1 (9783)							4.7 (6921)	19.7 (10381)	5.2 (6622)	17.5 (3154)			R	18.7 (9250)	19.9 (10123)	97.3 (1899)	22.6 (9526)	23.5 (6650)	40.1 (9515)	29.8 (8888)						R	37.1 (7893)	37.1 (19484)					
(inpatient)	32,515			R	34.3 (4589)	27.9 (24634)							7.7 (15404)	28.6 (27158)	8.5 (15578)	29 (6605)			R	29.9 (23266)	30.5 (26295)	97.3 (44163)	30.9 (25181)	33.6 (15332)	49.9 (24739)	39.5 (21969)						R	40.6 (3786)	16.2 (117)					
(outpatient)	2,309			R	35.6 (342)	51.8 (1716)							17.6 (921)	51.8 (1971)	20 (955)	51.1 (328)			R	53 (473)	54.5 (1758)	98.1 (215)	58.9 (1724)	50.9 (906)	66.7 (1924)	59.5 (1535)						R	56.3 (1395)	56.3 (117)					
<i>Acinetobacter</i> spp.	4,568				71.7 (819)	69.6 (2140)							35.1 (2340)	63.4 (3065)	37.6 (2369)	67.7 (1985)				29.7 (3164)	74.9 (2445)	85 (249)	92.9 (3394)	94.6 (1804)	97.9 (3543)	95.6 (2084)						R	93.7 (2680)	70.5 (294)					
<i>Aeromonas hydrophila</i>	1,272				84.7 (713)				82 (194)				85.4 (731)	88.6 (784)	85.8 (793)	96.3 (252)			R	29.7 (340)	74.9 (610)	85 (640)	92.9 (700)	94.6 (600)	97.9 (796)	95.6 (762)						R	93.7 (466)	70.5 (324)					
<i>Burkholderia cepacia</i> complex	1,497			R	R	R	R							87.8 (1229)					R	80.2 (1177)		R	64.8 (290)							R	96.9 (844)								
<i>Burkholderia mallei</i>	16																																						
<i>Burkholderia pseudomallei</i>	3,545				83.6 (471)									96.7 (1707)						R	96.4 (617)		R	64.8 (290)										R	95.3 (605)	84.8 (66)			
<i>Citrobacter freundii</i>	1,637			R	R	R	83.6 (1143)	R	R	R	R		82.3 (548)	63.7 (1130)	70 (1335)	63.8 (898)	70 (454)			R	91.8 (1132)	89.5 (1111)	93 (1263)	64 (1243)	66.3 (569)	98.3 (1302)	83.5 (1177)						83.3 (30)	71.2 (182)					
<i>Enterobacter cloacae</i>	10,834			R	R	R	82.1 (7641)	R	R				78.8 (4689)	63.3 (6664)	67 (8587)	64.9 (6635)	73.6 (2940)			R	91.1 (6663)	91.2 (7570)	84.4 (8188)	84.4 (1013)	69.9 (3675)	78.4 (8504)	97.5 (7287)	82.5 (2811)						50.6 (89)	72.9 (2811)				
<i>Enterobacter</i> spp.	4,237			6	11.9 (2008)	33.7 (2458)	83.6 (332)	7.5 (2837)	23.4 (145)	47.9 (154)	-	-	83.9 (4689)	64.3 (6664)	72.8 (8587)	68.9 (6635)	69 (2940)				21.8 (946)	91.5 (2735)	87.1 (2111)	94.9 (2995)	70.1 (2795)	83.2 (1746)	97.1 (3154)	86.4 (2946)						76.7 (308)	74.1 (2811)				
<i>Escherichia coli</i> (all isolates)	98,720			14.8 (57148)	88.2 (99499)	81.9 (12573)	90.7 (22961)	32.6 (16118)	50.8 (21811)	53.8 (23181)			85.4 (42522)	55 (6495)	67.7 (90727)	56.1 (64191)	61.9 (24532)				86.8 (33692)	96.4 (63796)	96.3 (65720)	96.9 (5870)	39.6 (74345)	44.7 (34821)	98.5 (34821)	96.7 (71942)	96.7 (71952)					85.2 (2269)	81.8 (220)				
(Urine-inpatient)	25,152			13	63.7 (14853)	95.3 (15999)	87.5 (6105)	87.5 (17612)	47.2 (7494)	48 (9872)	-	-	86.3 (4428)	48.1 (5685)	60.2 (6223)	56.3 (15559)	56.3 (3847)				82.5 (8421)	95.2 (10472)	95 (7299)	95.4 (19937)	97.8 (2283)	32.3 (18271)	36.9 (8955)	96.1 (19170)	82.8 (11251)					96.3 (2261)	84.6 (1509)				
(Urine-outpatient)	9,716			13.7 (6603)	67.1 (2586)	65.1 (1515)	92 (7496)		37.9 (269)	36.1 (308)	-	-	91.7 (4248)	58.7 (6752)	70.1 (8177)	59.7 (6294)	63.7 (2743)				85.8 (3751)	97.6 (6074)	96 (947)	97.8 (1717)	30.1 (833)	36.4 (787)	98.8 (3604)	84.6 (1735)					96.8 (2252)	97.2 (1386)					
<i>Haemophilus influenzae</i> (all isolates)	2,817			61.3 (2542)	92.4 (2139)	91.5 (294)	98.9 (179)						91.9 (631)	91.5 (2106)	96.2 (548)	98.3 (1626)					94.7 (418)	96.2 (1004)	98.3 (1590)	98.5 (975)									87.4 (970)	45.8 (2392)					
(age 0-5 years old)	370			57.8 (332)	91.6 (299)	90.9 (33)	97.1 (34)						95.1 (82)	98.5 (285)	97.9 (95)	98 (248)					92.3 (65)	97.3 (148)	98.5 (219)	100 (69)										89.6 (125)	73.9 (309)				
(age > 5 years old)	2,380			82.1 (2145)	82.5 (1785)	91.9 (258)	99.3 (142)						91.4 (1787)	98.3 (1787)	95.8 (454)	98.2 (1354)					95.2 (353)	98.7 (788)	99.2 (1382)	99.3 (461)										87.1 (837)	46.8 (2070)				
(CSF)	12			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
(Sterile sites) <sup>†</sup>	257			57 (235)	92.1 (190)	-	-	-					98.2 (56)	99.5 (183)	100 (73)	98.2 (168)					93.6 (47)	98.2 (111)	98.2 (140)	100 (36)										86.7 (75)	55.3 (237)				
(Non-sterile sites) <sup>†</sup>	2,603			61.6 (2348)	92.5 (1981)	91.6 (273)	98.7 (159)						91.3 (1956)	98.2 (1856)	95.7 (489)	98.3 (1485)					91.3 (378)	96 (915)	98.6 (378)	99.2 (1479)	99.5 (347)										87.6 (866)	45.1 (2213)			
<i>Klebsiella aerogenes</i>	3,631			R	R	R	81.5 (2593)	R	R				81.1 (1681)	95 (2533)	71.4 (3023)	67.9 (2399)	77 (861)			R	93 (2164)	86.9 (2552)	94.1 (2665)	95.3 (290)	72.5 (2829)	80.6 (1097)	87.4 (9020)	86.2 (2694)						86.3 (36)	77.7 (2700)				
<i>Klebsiella oxytoca</i>	1,368			0.9 (752)	82.3 (98)	86.1 (115)	88.1 (866)	29.3 (314)	27.7 (323)	72.4 (366)			82.9 (615)	74.1 (899)	78.8 (1132)	76.8 (858)	82.1 (380)				89.9 (513)	95.9 (817)	95.9 (817)	95.5 (1000)	88.4 (1032)	76.6 (444)	97.8 (1722)	96.5 (966)						87.8 (1001)					
<i>Klebsiella pneumoniae</i> (all isolates)	75,030			R	61.7 (92140)	63.8 (8972)	71.5 (34765)	49.2 (16370)	41.4 (4600)	53.1 (19311)			88.2 (35841)	58.2 (47962)	59 (61285)	57.2 (48472)	62.6 (18934)				79.9 (27195)	86.7 (49239)	87.7 (51286)	87.5 (57911)	96.4 (16881)	51.2 (87303)	63.7 (26896)	94.7 (69212)	84.7 (52138)						82.8 (847)	82.8 (67)			
(ICU)	9,444			R	91 (7003)	47 (1238)	62.8 (8948)	39 (1543)	33 (215)	41.1 (2462)			61.8 (4388)	45.1 (6251)	47.9 (7875)	45.6 (6851)	54.3 (2485)				78 (3640)	81 (6259)	83 (6559)	83.2 (7429)	95.7 (836)	44.9 (7091)	58.6 (4070)	92.9 (7615)	78.8 (8991)						55.6 (54)	49.8 (6449)			
(inpatient)	40,974			R	39.4 (28251)	52.3 (5137)	69.7 (28835)	44.4 (7866)	40 (2378)	49.4 (8713)			69.4 (17143)	52.9 (25748)	56.3 (22895)	54.7 (25817)	62.8 (9359)				78.8 (13482)	86.1 (27149)	87.3 (37161)	95.7 (2415)	50 (31057)	62.8 (15710)	94.5 (32004)	82.3 (28801)						47.9 (499)	58.6 (73)				
(outpatient)	7,476			R	70.9 (5638)	63.6 (830)	81.4 (5485)	60 (1388)	51.3 (610)	66.8 (2266)			81 (488)	67.7 (5994)	73.6 (4553)	72.3 (1851)	75.7 (1851)				82.6 (2968)	89.9 (5249)	91.5 (4513)	91.1 (3732)	97.7 (732)	58.7 (2904)	70.6 (3966)	96.1 (5629)	86 (5367)						61.4 (83)	67.9 (387)			
<i>Morganella morganii</i>	3,013			R	R	R	39.4 (376)	95 (1213)	R	R	R	R	92.1 (1148)	82 (2015)	90.1 (2443)	89.9 (1921)	86.2 (832)				50 (1280)	98.8 (1915)	56.5 (2650)	96.7 (2650)	R	70.7 (2294)	76.7 (1078)	99.2 (2421)	84.9 (2138)						R	72.4 (2248)			
<i>Neisseria meningitidis</i>	13																																						
<i>Proteus mirabilis</i>	13,386			54.7 (9354)	86 (1719)	81.4 (8611)	97.9 (2571)	42.1 (1534)	76.2 (4134)	83.6 (4134)			94.6 (9160)	83.8 (11259)	83.9 (8609)	86.9 (3251)	85.4 (3251)				94.4 (15151)	95.6 (8338)	80.4 (19203)	97.2 (9021)	72 (10437)	73 (4416)	99.4 (11133)	82.6 (3958)						R	79.6 (385)	R			
<i>Proteus vulgaris</i>	1,837			R	62.7 (1521)	85 (1739)	97.3 (2359)						96.5 (981)	85.8 (1412)	82.4 (1623)	89 (1216)	94.3 (331)																						

Organism	TOTAL ISOLATES	BETA - LACTAMS														CARBAPENEMS				POLY MYXINS	QUINOLONES		AMINOGLYCOSIDES			GLYCOPOLYPTIDES		MISCELLANEOUS													
		PENICILLIN	PENICILLIN BY MIC			AMOXICILIN / CLAVULANIC ACID	AMPCILLIN / SULBACTAM	PIPERACILLIN / TAZOBACTAM	CEFZADOLIN (A)	CEFAZOLIN (U)	CEFOXIME SODIUM (parenteral)	CEFOXIME SODIUM (oral)	CEFOPERAZONE / SULBACTAM <sup>a</sup>	CETOPAXIME	CEFTAZIDIME	CEFTIAXAXONE	CEFEPIME	DOXAACILLIN	CEFOXTIN		ERTAPENEM	IMPENEM	MEROPENEM	COLISTIN BY MIC	SPIROFLOXACIN	LEVOFLOXACIN	AMIKACIN	GENTAMICIN	GENTAMICIN 120 µg	VANCOMYCIN	TEICoplanin	FUSIDICIN	CLINDAMYCIN	ERYTHROMYCIN	NITROFRANTOIN (U)	CHLORAMPHENICOL	SOCI-FRMOXAZOLE	TETRACYCLINE			
			AMPCILLIN	AMOXICILIN / CLAVULANIC ACID	AMPCILLIN / SULBACTAM																																				
Salmonella, Typhoidal	77																							35.2 (54)																	94.1 (65)
Salmonella spp.	8,354																							63.1 (8120)	48.6 * (545)														90.3 (1228)	87.5 (7174)	
Serratia marcescens	1,656			R	R		R	R	R	R													89.9 (1238)	89 (707)	98 (1303)	95.3 (1146)										R		90.2 (1058)			
Shigella spp.	213																						52 (162)																22.5 (191)		
Stenotrophomonas maltophilia	8,006			R	R	R	R						R		45.5 * (899)					R	R	R		91.7 (3276)		R	R	R		R								93.9 (8419)	R		
Vibrio cholerae (all serotypes)	278																																						87.6 (225)	89.5 (124)	
(O1)	20																																								
(non O1, non O139)	254																																						89.2 (203)	90.4 (114)	
Vibrio parahaemolyticus	1,025													91.2 (274)	95.2 (186)	92.9 (56)		88.6 (70)		95.5 (67)	97.1 (182)		60.1 (737)	90.8 (88)	92.7 (35)	96.6 (87)												98.5 (838)	99.2 (800)		
Vibrio spp.	366													90 (180)	95.4 (175)	88.1 (87)		83.7 (91)		87.8 (115)	93.7 (127)		81.8 (253)	91 (89)	88.9 (126)	97.2 (141)												92.4 (249)	94.3 (132)		
Enterococcus faecalis	24,690	88.2 (17207)	81.1 (1719)	94.4 (21345)				R	R	R	R	R	R	R	R	R							23.6 * (6391)	37.6 * (3524)		R	R	48.9 * (5845)	96.8 (21811)	99 (2146)	93.2 * (4706)		R		12.9 (5403)	97.1 (1783)		R	7.3 * (4772)		
Enterococcus faecium	12,904	6.7 (8929)	5.4 (878)	8.3 (11084)				R	R	R	R	R	R	R	R	R							2.5 * (3943)	6.7 * (1994)		R	R	61.8 (3358)	92.4 (11412)	88.1 (1117)		R		5.1 (2523)	18.6 (553)		R	8.1 * (3022)			
Enterococcus spp.	4,363	49.5 (2156)	51.1 (157)	58.7 (2676)																			27.2 * (235)	26.8 * (299)			62.9 (760)	94 (2909)	91.2 (148)				26.5 (830)					11.2 * (439)			
Staphylococcus aureus (all isolates)	40,598	8.6 (13339)	11.4 (1719)																				87.9 * (37795)				93.9 (32154)	98.6 (7075)	98.4 (3448)	88.7 (2979)	85.9 (62)	95.2 (798)	93.7 (2391)	97.1 (3391)	92.7 (1950)						
(MRSA)	2,955	0 (957)	-																				0 * (2970)				96.8 (157)	43.6 (433)	87.1 (1059)	100 (524)	-		41 (2755)	35.2 (2683)		89.7 (302)	86.9 (2630)	92.4 (980)			
(MSSA)	28,347	8.2 (8317)	9.4 (32)																				100 (29538)				98.8 (7776)	98.6 (4039)	98.7 (1173)	93.7 (2598)	91.8 (2488)	97.8 (45)	96.9 (2774)	98 (26312)	98.4 (7159)						
(ICU)	3,280	10.8 (961)	12.9 (450)																				89.1 * (3057)				95 (2165)	99.0 (360)	99.2 * (2654)	88.8 (2781)	86.5 (566)	93.5 (278)	97.6 (278)	98.8 (1532)							
(inpatient)	21,934	8 (6937)	11.1 (2214)																				86.5 * (20543)				91 (7472)	92.3 (4077)	95.4 (15061)	98.6 (4304)	98.6 * (1888)	88.2 (18433)	85.4 (18346)	94.1 (34)	92.9 (3003)	96.6 (18496)	88.8 (5734)				
(outpatient)	5,315	10.7 (1585)	11.9 (495)																				86.6 * (5061)				91.2 (1838)	96.1 (1192)	97.2 (3511)	98.1 (976)	96.7 * (488)	88.6 (4576)	85.5 (4662)	-	94.5 (1173)	97.4 (4615)	63.7 (1574)				
Staphylococcus, coagulase negative	59,101	10.7 (13587)	10.4 (3350)																				41.2 * (34499)				60.2 (11453)	62.9 (591)	72.5 (22088)	96.1 (4775)	92.0 * (3272)	45.3 (31095)	38.6 (30183)	94.7 (76)	88.7 (5092)	65.8 (31219)	54.6 (15453)				
Staphylococcus, coagulase negative (blood)	34,741	11.7 (7881)	12 (2384)																				42.3 * (21831)				60.1 (8384)	62.6 (3648)	72.2 (15301)	96.2 (3373)	92.3 * (1603)	48.5 (19794)	38.7 (19927)		90.2 (2912)	65 (1898)	57.6 (8912)				
Streptococcus agalactiae	5,250	99.3 (4138)	95.5 (541)	97.6 (1576)																																					
Streptococcus, β-hemolytic not Group A, B, D	2,881	90 (2298)	91.2 (265)	92.6 (787)																																					
Streptococcus pyogenes	7,619	98.9 (6307)	95.3 (539)	98.7 (2502)																																					
Streptococcus pneumoniae (all isolates)	4,972	72.7 * (2592)	35.7 (1273)	80.1 * (151)																																					
(age 0-5 years old)	517	80.3 * (238)	15.3 (111)	-																																					
(age > 5 years old)	4,247	73.7 * (2250)	38.2 (1067)	81.8 * (121)																																					
(Sterile sites) <sup>b</sup>	1,444	78.1 * (761)	47.7 (419)	87.1 * (31)																																					
(Non-sterile sites) <sup>c</sup>	3,702	70.9 * (1819)	30.2 (901)	78.4 * (126)																																					
(Meningitis: by E-test)	57																																								
(Nonmeningitis: by E-test)	4,954																																								

\* ٴٴٴٴٴٴٴ disk diffusion ٴٴٴ MIC ٴٴٴ

<sup>a</sup> : No CLSI Interpretive Criteria. Interpretate according to cefoperazone/sulbactam in *Enterobacteriaceae*

<sup>f</sup> : Interpretate according to cefoxitin susceptibility test

<sup>b</sup> : Blood, Pleural Fluid

<sup>b</sup> : High-Level Aminoglycoside

<sup>c</sup> : Sputum, Ear, Sinus

<sup>b</sup> : Urine, Urine Catheter, Urine Clean- Voided

<sup>d</sup> : Interpretate according to oxacillin susceptibility test

<sup>wt</sup> : Wild-type

<sup>e</sup> : MIC Interpretive Criteria

R : Intrinsic resistance

%S



≥ 90 80-89 70-79 50-69 < 50