

PERCENTAGE OF SUSCEPTIBLE Gram negative Bacilli Gastrointestinal Tract January - December 2019	Ampicillin	Co-trimoxazole	Norfloxacín	Ciprofloxacín
Aeromonas sp.	20* (10)	91* (11)	100* (11)	80* (10)
Salmonella sp.	59 (132)	88 (138)	96 (137)	81 (129)
Salmonella Group B	48 (44)	91 (44)	100 (44)	84 (44)
Salmonella Group C	49 (39)	77 (42)	91 (42)	74 (38)
Salmonella Group E	76 (33)	94 (36)	100 (35)	94 (31)
Shigella sp.	80* (5)	0* (5)	40* (5)	20* (5)
Vibrio parahaemolyticus	0* (11)	100* (12)	100* (12)	36* (11)
Vibrio cholerae non O1, non O139	86* (7)	86* (7)	100* (7)	71* (7)

PERCENTAGE OF SUSCEPTIBLE Mycobacterium tuberculosis January - December 2019	Streptomycin	Isoniazid	Rifampin	Ethambutol
Mycobacterium tuberculosis (MDR-TB 0.7%)	93 (270)	87 (270)	99 (270)	100 (270)

* = n<30

MDR-TB = ตี้อตล INH+RF , RR-TB = ตี้อตล RF , XDR-TB = ตี้อตล INH&RF&AG&Q

() = Number tested

SECTION OF MICROBIOLOGY DEPARTMENT OF PATHOLOGY
PRAPOKKLAO HOSPITAL



ANTIMICROBIAL SUSCEPTIBILITY - JANUARY - DECEMBER 2019

PERCENTAGE OF SUSCEPTIBLE Gram negative cocci & Miscellaneous January - December 2019	A		Beta-Lactam				G	Miscellaneous							
	Gentamicin	Genta.High.Level	Amoxi/clav.	Ampicillin	Cefotaxime	Cefoxitin	Penicillin	Vancomycin	Chloramphenicol	Clindamycin	Co-trimoxazole	Erythromycin	Fosfomycin	Fusidic acid	Tetracycline
Enterococcus sp.		74 (814)		67 (809)			56 (816)	97 (816)	82 (245)			17 (370)	96 (270)		
Enterococcus faecium(9%VRE)		84 (264)		7 (261)			5 (264)	91 (264)	93 (56)			10 (88)	50* (6)		
E.faecium(H/C)		82* (27)		12* (26)			7* (27)	89* (27)	87* (15)			11* (27)			
E.faecium(Urine)		83 (179)		2 (178)			2 (179)	89 (179)					50* (6)		
Enterococcus faecalis		69 (532)		97 (530)			82 (534)	100 (534)	78 (177)			19 (267)	97 (263)		
E.faecalis(H/C)		74 (31)		100 (31)			81 (31)	100 (31)	91* (21)			23* (30)			
E.faecalis(Urine)		56 (272)		97 (273)			73 (274)	100 (274)						97 (271)	
Streptococcus pneumoniae					100* (22)		100 (34)	100 (35)	90* (20)	86 (35)	56 (36)	63 (35)			23* (26)
Staphylococcus aureus (All)	87 (764)		86 (772)			84 (771)	8 (74)	100* (6)		78 (754)	97 (744)	77 (755)	99 (773)	98 (742)	
S.aureus (MRSA)	23 (133)		14 (137)			0 (137)	0* (13)	100* (7)		8 (133)	81 (122)	5 (134)	96 (137)	98 (133)	
S.aureus(MRSA ICU)	0* (11)		0* (12)			0* (12)	0* (1)			8* (12)	75* (12)	0* (12)	100* (12)	100* (12)	
S.aureus(MRSA IPD Non ICU)	23 (124)		13 (127)			0 (127)	0* (12)	100* (7)		7 (123)	82 (112)	6 (124)	95 (127)	98 (123)	
S.aureus(MRSA OPD)	75* (4)		75* (4)			0* (4)				0* (4)	100* (4)	0* (4)	100* (4)	100* (4)	
S.aureus (MSSA)	100 (657)		100 (661)			100 (662)	10 (61)			91 (649)	100 (646)	90 (649)	100 (662)	98 (632)	
S.aureus(MSSA ICU)	100 (54)		98 (54)			100 (54)	0 (3)			96 (52)	100 (51)	94 (53)	100 (54)	100 (54)	
S.aureus(MSSA IPD Non ICU)	100 (563)		100 (567)			100 (568)	13 (48)			91 (557)	100 (558)	90 (556)	100 (568)	98 (542)	
S.aureus(MSSA OPD)	100 (55)		100 (55)			100 (55)	0* (12)			89 (55)	100 (52)	91 (55)	96 (55)	98 (50)	
Staphylococcus coagulase negative	67 (205)		79 (204)			42 (201)	6* (17)	100* (1)		46 (160)	63 (198)	40 (163)	77 (204)	78 (199)	
Staphylococcus saprophyticus	94* (16)		88* (16)			69* (16)	0* (1)			42* (12)	88* (16)	42* (12)	R* (16)	R* (16)	
Staphylococcus lugdunensis	75* (12)		100* (12)			92* (12)				100* (12)	92* (12)	92* (12)	100* (12)	100* (11)	
Alpha-hemolytic Streptococcus***				0 (32)			59* (17)	100* (25)	91* (21)	78 (32)		67 (33)			21* (29)

*** = Alpha-hemolytic Streptococcus Penicillin Intermediated = 33.3%

** = Sterile site only

A=Aminoglycoside

G=Glycopeptide

R=Intrinsic Resistance

PERCENTAGE OF SUSCEPTIBLE Gram negative cocci & Miscellaneous January - December 2019	Penicillin	Cefotaxime	Ceftazidime	Ceftriaxone	Ofloxacin	Ciprofloxacin	Tetracycline	Ampicillin	Amoxi/clave	Chloramphenicol	Co-trimoxazole
	Neisseria gonorrhoeae	4* (23)	70* (23)	57* (23)	61* (23)	0* (23)	0* (23)	0* (18)			
Haemophilus influenzae		100 (48)					65 (40)	49 (47)	94 (48)	87 (38)	42 (48)

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PERCENTAGE OF SUSCEPTIBLE	A		Beta-lactam						BLBI				Quinolone			Mis	
	Gentamicin	Amikacin*	Ampicillin	Cefotaxime	Ceftriaxone	Ceftazidime***	Imipenem***	Meropenem***	Biapenem***	Amoxi/clave.	Pipera/Tazob.***	Ampicillin/Sulb.***	Norfloxacin**	Ciprofloxacin***	Levofloxacin	Co-trimoxazole	Colistin
Gram negative Bacilli																	
Non-Ferment																	
January - December 2019																	
Acinetobacter baumannii(All)	44 (675)	49 (655)	0* (8)	4 (693)	9* (22)	32 (692)	31 (692)	31 (692)	R (33)	15 (667)	29 (664)	39 (692)	27 (45)	30 (650)		39 (681)	100 (690)
Acinetobacter baumannii(ICU)	32 (133)	43 (130)	0* (2)	2 (139)	20* (5)	20 (139)	19 (139)	18 (139)	R* (4)	13 (131)	17 (139)	27 (139)	20* (5)	21 (130)		24 (134)	100 (139)
Acinetobacter baumannii(non ICU)	46 (568)	50 (550)	0* (6)	4 (583)	5* (19)	33 (582)	33 (582)	33 (582)	R (31)	15 (561)	31 (554)	40 (582)	28 (40)	31 (544)		42 (574)	100 (580)
Acinetobacter baumannii(Sputum)	38 (462)	44 (449)	0* (1)	3 (475)	0* (2)	25 (476)	24 (476)	24 (476)	R* (24)	12 (453)	23 (456)	33 (476)		24 (445)		36 (471)	100 (475)
Acinetobacter baumannii(H/C)	56 (79)	58 (77)	0* (2)	7 (82)	25* (8)	46 (80)	43 (80)	43 (80)	29* (7)	34 (79)	42 (77)	53 (80)		48 (75)		42 (79)	100 (81)
Burkholderia pseudomallei	0* (17)		0* (17)	78* (9)	83* (18)	100* (18)				100* (17)				13* (16)		100* (10)	
Pseudomonas aeruginosa(All)	94 (601)	95 (599)	100* (2)	100* (1)		90 (621)	89 (621)	89 (621)	94 (33)		90 (590)			91 (595)			100 (618)
Pseudomonas aeruginosa(ICU)	95 (62)	98 (63)				91 (64)	84 (64)	84 (64)	100* (2)		92 (64)			94 (63)			100 (63)
Pseudomonas aeruginosa(non ICU)	94 (556)	95 (554)				89 (575)	89 (575)	90 (575)	91 (33)		90 (542)			91 (550)			100 (573)
Pseudomonas aeruginosa(Sputum)	99 (179)	100 (188)				95 (188)	91 (188)	92 (188)	95* (20)		96 (168)			95 (188)			100 (188)
Pseudomonas aeruginosa(H/C)	90 (49)	94 (49)				84 (51)	92 (51)	92 (51)	100* (5)		90 (51)			90 (50)			100 (51)
Pseudomonas aeruginosa(Urine)	74 (103)	76 (101)				71 (105)	71 (105)	69 (105)	75* (4)		71 (101)			72 (98)			100 (104)
Stenotrophomonas maltophilia	R (93)	R (92)	R (93)	R (96)	R (85)	0 (82)	R (95)	R (95)		R (93)	R (90)	2 (95)	67* (3)	58 (92)	98 (94)	96 (92)	100* (4)

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**= Only urinary tract infection

A=Aminoglycoside Mis=Miscellaneous R=Intrinsic Resistance

***=Test after organism non-susceptible to Cefotaxime

PERCENTAGE OF SUSCEPTIBLE Gram negative Bacilli Enterobacteriaceae January - December 2019	A		Beta-lactam								BLBI			Q		Mis	
	Gentamicin	Amikacin*	Ampicillin	Cefazolin**	Cefotaxime	Ceftriaxone	Ceftazidime***	Ertapenem***	Imipenem***	Meropenem***	Amoxi/clave.	Pipera/Tazob.***	Ampicillin/Sulb.***	Norfloxacin**	Ciprofloxacin***	Co-trimoxazole	Fosfomycin**
Citrobacter sp.	91 (75)	100* (22)	4 (75)	69* (26)	78 (80)	77 (79)	18* (22)	71* (21)	72* (22)	71* (21)	65 (77)	71* (21)	23* (22)	92* (25)	78 (59)	87 (76)	
Enterobacter cloacae	84 (176)	100 (57)	R (177)	R (33)	68 (183)	70 (183)	20 (65)	89 (63)	91 (64)	91 (63)	R (175)	60 (63)	R (65)	67 (33)	75 (154)	71 (175)	
Enterobacter aerogenes	94 (62)	94* (18)	R (62)	R* (9)	78 (67)	77 (66)	30* (20)	80* (20)	85* (20)	84* (19)	R (61)	72* (18)	R* (20)	100* (8)	82 (54)	92 (63)	
Escherichia coli(All)	66 (1800)	99 (870)	16 (1814)	51 (1052)	54 (1855)	54 (1853)	48 (912)	97 (909)	98 (912)	98 (909)	77 (1802)	91 (875)	61 (912)	43 (1039)	33 (1265)	45 (1827)	98 (902)
Escherichia coli(ICU)	66 (110)	97 (57)	20 (110)	54 (50)	51 (111)	52 (111)	38 (60)	100 (59)	97 (60)	100 (59)	79 (110)	91 (58)	73 (60)	53 (49)	38 (82)	49 (105)	97 (59)
Escherichia coli(IPD Non ICU)	65 (1605)	99 (787)	16 (1620)	50 (949)	53 (1656)	53 (1654)	47 (825)	97 (822)	97 (825)	97 (823)	77 (1607)	91 (793)	59 (825)	42 (937)	33 (1132)	45 (1635)	98 (817)
Escherichia coli(OPD)	62 (154)	99 (71)	19 (153)	48 (95)	58 (159)	58 (159)	55 (74)	100 (74)	100 (74)	100 (74)	78 (152)	93 (70)	65 (74)	34 (93)	29 (108)	41 (157)	100 (74)
Escherichia coli(H/C)	71 (366)	100 (162)	17 (365)			56 (376)	47 (172)	98 (172)	98 (172)	99 (171)	80 (364)	92 (167)	61 (172)		45 (348)	38 (374)	
Escherichia coli(Sputum)	38 (462)	44 (449)	0* (1)			0* (2)	25 (476)		24 (476)	24 (476)	12 (453)	23 (456)	33 (476)		24 (445)	36 (471)	
Escherichia coli(Urine)	66 (1171)	99 (614)	17 (1179)	49 (1204)	50 (1206)	51 (1203)	46 (642)	97 (640)	97 (642)	97 (640)	76 (1167)	90 (610)	57 (642)	42 (1189)	14 (610)	45 (1193)	99 (636)
Klebsiella pneumoniae(All)	82 (1011)	90 (442)	R (1022)	52 (208)	59 (1056)	60 (1050)	18 (463)	79 (459)	80 (463)	79 (460)	66 (1015)	60 (449)	25 (461)	55 (204)	51 (888)	59 (1028)	
Klebsiella pneumoniae(ICU)	79 (118)	81 (74)	R (119)	167* (6)	37 (123)	38 (123)	9 (79)	61 (76)	62 (78)	60 (77)	51 (115)	46 (78)	17 (78)	33* (6)	43 (110)	46 (120)	
Klebsiella pneumoniae(IPD Non ICU)	82 (883)	92 (378)	R (893)	52 (195)	60 (924)	61 (918)	18 (395)	81 (391)	82 (396)	82 (392)	66 (890)	61 (382)	25 (394)	55 (191)	51 (770)	60 (899)	
Klebsiella pneumoniae(OPD)	81 (41)	100* (11)	R (41)	57 (14)	79 (42)	79 (42)	36* (11)	91* (11)	91* (11)	91* (11)	75 (40)	70* (10)	36* (11)	50* (14)	62 (34)	63 (41)	
Klebsiella pneumoniae(H/C)	79 (162)	84 (73)	R (166)		58 (170)		18 (76)	73 (74)	72 (76)	74 (73)	69 (166)	60 (75)	28 (76)		52 (154)	66 (164)	
Klebsiella pneumoniae(Sputum)	82 (518)	91 (246)	R (520)		53 (541)	54 (540)	13 (260)	78 (255)	80 (260)	79 (259)	62 (515)	57 (250)	21 (259)		52 (504)	56 (530)	
Klebsiella pneumoniae(Urine)	75 (237)	92 (128)	R (238)	48 (244)	51 (244)	53 (240)	21 (132)	84 (132)	84 (132)	83 (131)	57 (235)	53 (127)	24 (131)	54 (241)	12 (125)	45 (232)	
Morganella morganii ss. morganii	87* (63)	100* (9)	R (65)	R* (29)	92 (65)	95 (65)	67* (9)	100* (8)	88* (8)	100* (9)	R (64)	100* (7)	38* (8)	73* (30)	68 (40)	77 (65)	
Proteus mirabilis	83 (171)	100* (18)	51 (174)	79 (58)	90 (179)	91 (179)	81* (21)	100* (21)	100* (21)	100* (21)	93 (172)	100* (20)	612* (21)	69 (54)	71 (122)	58 (178)	
Proteus sp.	94 (36)	100* (1)	14 (35)	0* (8)	97 (37)	97 (37)	100* (1)	100* (1)	100* (1)	100* (1)	83 (35)	100* (1)	100* (1)	100* (8)	85 (27)	84 (37)	
Salmonella sp.			48 (44)		89 (46)		38* (8)	100* (10)	100* (8)	100* (8)	100 (45)	100* (8)	63* (8)	100* (4)	63 (41)	91 (46)	
Serratia marcescens	100* (22)	100* (1)	R* (21)	R* (2)	100* (22)	100* (22)	100* (2)	100* (2)	100* (2)	100* (2)	R* (20)	100* (2)	0* (2)	67* (3)	100* (17)	95 (21)	

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