



**National Antibiotic Surveillance Forum
Private Susceptibility Data**

JULY-DECEMBER 2007

***S. pneumoniae*: CSF**

		Percentage							
(Number of laboratories)		Jhb (3)	Pta (3)	Dbn (2)	CT (2)	PE (1)	EL (1)	Bfn (2)	Whk (1)
n = Total number of isolates		12	9	14	6	3	5	0	0
Penicillin~	Susceptible	36	58	53	12	100	40		
	IR	64	25	47	76	-	60		
	HR	-	17	-	12	-	-		
3 rd generation cephalosporins (parenteral)*	Susceptible	100	100	100	100	100	100		
	IR	-	-	-	-	-	-		
	HR	-	-	-	-	-	-		

~ Penicillin breakpoints: NCCLS S \leq 0.06 IR 0.12-1 HR \geq 2

* 3rd Cephalosporins : NCCLS S \leq 0.5 IR 1 HR \geq 2

***S.pneumoniae*: URTI**

		Percentage							
(Number of laboratories)		Jhb (3)	Pta (3)	Dbn (2)	CT (2)	PE (1)	EL (1)	Bfn (2)	Whk (1)
n = Total number of isolates		547	350	181	230	25	10	21	17
Penicillin~	Susceptible	27	43	41	32	48	40	60	59
	IR	68	56	53	64	52	60	30	18
	HR	5	1	6	4	-	-	10	23
Telithromycin - susceptible		100	100	100	100	100	100	100	100
Erythromycin – susceptible		44	64	66	39	52	70	25	76
3 rd generation cephalosporins (parenteral)*	Susceptible	95	97	99	88	100	100	92	78
	IR	5	3	1	9	-	-	8	22
	HR	-	-	-	3	-	-	-	-
Quinolones	Levo	NT	NT	100#	NT	NT	NT	NT	100
	Moxi	100	100	100	100	100	100	100	100

~ Penicillin breakpoints: NCCLS S \leq 0.06 IR 0.12-1 HR \geq 2

* 3rd Cephalosporins : NCCLS S \leq 0.5 IR 1 HR \geq 2

1 laboratory only, NT: Not tested

***S. pneumoniae*: LRTI**

		Percentage							
(Number of laboratories)		Jhb (3)	Pta (3)	Dbn (2)	CT (2)	PE (1)	EL (1)	Bfn (2)	Whk (1)
n = Total number of isolates		375	961	163	511	50	7	53	1
Penicillin~	Susceptible	73	65	93	82	54	86	92	100
	IR	26	34	7	18	44	14	5	-
	HR	1	1	-	-	2	-	3	-
Telithromycin - susceptible		100	100	100	100	100	100	100	100
Erythromycin – susceptible		47	49	58	42	34	86	76	100
3 rd generation cephalosporins (parenteral)*	Susceptible	97	97	99	96	98	86	100	100
	IR	3	3	1	4	2	14	-	-
	HR	-	-	-	-	-	-	-	-
Quinolones	Levo	NT	NT	98	NT	NT	NT	NT	100
	Moxi	100	100	98	100	100	100	100	100

~ Depending on laboratory, NCCLS penicillin or suggested IDSA penicillin breakpoints: S \leq 1 IR 2 HR \geq 4

* 3rd Cephalosporins NCCLS S \leq 1 IR 2 HR \geq 4

1 laboratory only, NT: Not tested

***S. pneumoniae*: Blood**

		Percentage							
(Number of laboratories)		Jhb (3)	Pta (3)	Dbn (2)	CT (2)	PE (1)	EL (1)	Bfn (2)	Whk (1)
n = Total number of isolates		134	80	55	35	18	12	9	0
Penicillin~	Susceptible	76	59	64	43	57	42	68	
	IR	21	37	34	52	43	50	32	
	HR	3	4	2	5	-	8	-	
Telithromycin - susceptible		100	100	100	100	100	100	100	
Erythromycin – susceptible		80	70	79	65	56	75	100	
3 rd generation cephalosporins (parenteral)*	Susceptible	99	98	100	100	100	83	100	
	IR	1	2	-	-	-	17	-	
	HR	-	-	-	-	-	-	-	
Quinolones	Levo	100#	NT	100	NT	NT	NT	NT	
	Moxi	100	100	100#	100	94	100	100	

~ Depending on laboratory, NCCLS penicillin or if isolated from patients with CAP suggested IDSA penicillin breakpoints

* 3rd Cephalosporins NCCLS S<=/=1 IR 2 HR >/=4

1 laboratory only, NT: Not tested

***S. pneumoniae*: Nasopharyngeal**

		Percentage							
(Number of laboratories)		Jhb (3)	Pta (3)	Dbn (1)	CT (1)	PE (1)	EL (1)	Bfn (2)	Whk (1)
n = Total number of isolates		0	0	43	11	1	0	0	0
Penicillin~	Susceptible			12	61	-			
	IR			68	39	100			
	HR			-	-	-			
Telithromycin - susceptible				100	100	100			
Erythromycin – susceptible				56	0	0			
3 rd generation cephalosporins (parenteral)*	Susceptible			100	100	100			
	IR			-	-	-			
	HR			-	-	-			
Quinolones	Levo			100	NT	NT			
	Moxi			NT	100	100			

~ Penicillin breakpoints: NCCLS S \leq 0.06 IR 0.12-1 HR \geq 2

* 3rd Cephalosporins : NCCLS S \leq 0.5 IR 1 HR \geq 2

Haemophilus influenzae

	Percentage Susceptible							
(Number of laboratories)	Jhb (3)	Pta (3)	Dbn (2)	CT (2)	PE (1)	EL (1)	Bfn (2)	Whk (1)
n = Total of isolates	1359	1897	481	910	89	56	215	13
Macrolides / azalides	100	100	80#	98	100	96	83	100
Telithromycin	100	100	100	100	99	98	100	100
Cotrimoxazole	49	48	44#	50	49	32	43	46
B-Lactamase production (incidence)	12	15	15	11	13	20	12	0
BLNAR % (incidence)	<1	<1	<1	0	-	NT	<1	0

Moraxella catarrhalis

(n = Total of isolates)	292	770	127	324	42	0	72	0
Macrolides / azalides	98	100	83#	98	100		96	
Telithromycin	99#	100	100	100	NT		100#	
Cotrimoxazole	33	21	59#	60	47		60	
B-Lactamase production (incidence)	95	97	89	92	94		90	

1 laboratory only

NT: Not tested

***E. coli* :URINE**

	Percentage Susceptible							
(Number of laboratories)	Jhb (3)	Pta (3)	Dbn (2)	CT (1)	PE (1)	EL (1)	Bfn (2)	Whk (1)
n = Total of isolates	10101	9605	4587	3705	755	418	601	513
ampicillin	26	27	27	32	20	21	32	29
1 st generation cephalosporins	85#	50	80	94#	NT	NT	40#	78
2 nd generation cephalosporins	95	90	93	98	74	98	94	93
Parenteral 3 rd generation cephalosporins	96	97	95#	100#	99	98	97	96
gentamicin	92	92	89	94	69	94	93	94
amikacin	99	99	94	100#	93	99	85	99
Amox / clavulanate	84	77	89	91	92	73	90	76
Ciprofloxacin	80	79	77	85	65	80	76	84
Levofloxacin	80	78	76#	85	65	80	75#	84
%ESBL	3	3	3	NT	NT	1	3	1

1 laboratory only NT: Not tested

E.coli: BLOODCULTURE

	Percentage Susceptible							
(Number of laboratories)	Jhb (3)	Pta (3)	Dbn (2)	CT (2)	PE (1)	EL (1)	Bfn (2)	Whk (1)
n = Total of isolates	178	129	67	87	14	14	14	4
Ampicillin	12	12	10	35	27	15	21	0
Cefuroxime	79	84	67	93	73	100	78	100
Ceftriaxone/cefotaxime	89	93	85	99	100	100	85	100
Cefepime	93	95	86	99	100	100	92	100
Amox / clavulanate	75	60	43	85	100	57	78	100
Piperacillin/tazobactam	85	92	77	99	100	100	85	100
gentamicin	88	84	68	95	100	86	85	100
amikacin	92	98	89	99	100	100	85	100
Ertapenem	100	100	92	100	100	100	100	100
Imipenem/meropenem	100	100	94	100	100	100	100	100
Ciprofloxacin	66	75	70	78	82	85	64	100
Levofloxacin	66	75	64#	78	82	85	83#	100
% ESBL	11	5	6	1	0	0	8	0

***E. coli*: ALL SOURCES**

(Number of laboratories)	Percentage Susceptible							
	Jhb (3)	Pta (3)	Dbn (2)	CT (2)	PE (1)	EL (1)	Bfn (2)	Whk (1)
n = Total of isolates	11916	7525	7394	4415	677	550	830	578
ampicillin	23	27	28	33	19	24	33	29
1 st generation cephalosporins	83#	49	73	94#	NT	NT	46#	77
2 nd generation cephalosporins	94	89	88	97	76	95	93	92
Parenteral 3 rd generation cephalosporins	95	96	90	98	99	98	96	98
Amox / clavulanate	83	75	79	88	91	74	86	76
Gentamicin	91	92	86	94	91	94	92	93
amikacin	98	98	92	98	99	98	88	99
Ertapenem	99	100	98	100#	100	100	100	100
Ciprofloxacin	79	79	78	84	88	81	77	83
Levofloxacin	79	79	80#	84	88	81	77#	83

1 laboratory only

NT: Not tested

***K.pneumo*: BLOODCULTURES**

	Percentage Susceptible							
(Number of laboratories)	Jhb (3)	Pta (3)	Dbn (2)	CT (2)	PE (1)	EL (1)	Bfn (2)	Whk (1)
n = Total of isolates	245	131	94	39	2	11	26	3
Ampicillin	0	0	0	0	0	0	0	0
Cefuroxime	36	32	28	35	50	36	50	100
Ceftriaxone/cefotaxime	36	34	44	38	56	36	57	100
Cefepime	36	37	57	38	50	45	61	100
Amox / clavulanate	34	34	28	38	50	27	57	67
Piperacillin/tazobactam	36	33	72	46	50	64	61	100
Gentamicin	50	57	74	69	100	64	73	67
Amikacin	66	71	87	71	50	91	92	NT
Ertapenem	97	99	97	92	100	100	100	100
Imipenem/meropenem	99	100	99	100	100	100	100	100
Ciprofloxacin	60	61	80	36	50	82	61	100
Levofloxacin	60	61	70#	NT	50	82	69#	100
% ESBL	58	55	33	59	50	55	38	0

***Enterobacter cloacae* & SPP: BLOODCULTURES**

	Percentage Susceptible							
(Number of laboratories)	Jhb (3)	Pta (3)	Dbn (2)	CT (2)	PE (1)	EL (1)	Bfn (2)	Whk (1)
n = Total of isolates	68	53	24	25	3	6	11	0
ampicillin	0	0	4	0	0	0	0	
Cefuroxime	22	9	8	4	0	67	9	
Ceftriaxone/cefotaxime	45	11	54	56	33	67	9	
Cefepime	70	81	54	72	67	83	90	
Amox / clavulanate	0	9	4	0	0	0	0	
Piperacillin/tazobactam	61	24	83	64	33	80	90	
Amikacin	82	98	96	84	100	100	100	
Gentamicin	75	83	83	48	67	83	90	
Ertapenem	100	88	95	96	100	83	100	
Imipenem/meropenem	100	100	95	100	100	100	100	
Ciprofloxacin	100	92	95	60	67	83	90	
Levofloxacin	100	92	90#	60	67	83	67#	
% ESBL	25	13	37	28	33	17	9	

***S. aureus*: BLOODCULTURES**

Percentage Susceptible								
(Number of laboratories)	Jhb (3)	Pta (3)	Dbn (2)	CT (2)	PE (1)	EL (1)	Bfn (2)	Whk (1)
n = Total of isolates	281	116	141	101	15	13	8	1
Cloxacillin	59	65	85	54	82	54	67	100
Cotrimoxazole	83	85	74	93	82	77	75	100
Erytromycin	56	63	59	54	55	69	75	NT
Clindamycin	56	63	87	54	55	69	75	NT
Fusidic acid	97	100	100#	98	55	92	100	100
Rifampicin	93	97	85#	94	91	77	100#	NT
Amikacin	74	Nt	90#	100#	NT	91	100#	NT
Gentamycin	87	69#	70	90	73	54	83#	NT
Teicoplanin	99	100	100	100#	100	100	100	NT
Vancomycin	100	100	100	100	100	100	100	NT
Linezolid	100	100	100	100	100	100	100	NT

***P. aeruginosa*: BLOODCULTURES**

Percentage Susceptible								
(Number of laboratories)	Jhb (3)	Pta (3)	Dbn (2)	CT (2)	PE (1)	EL (1)	Bfn (1)	Whk (1)
n = Total of isolates	156	84	66	32	4	3	10	4
Ceftazidime	49	73	59	69	67	67	80	75
Cefepime	47	70	62	65	67	67	80	75
Pip/tazobactam	39	78	56	62	67	67	80	75
Amikacin	54	67	71	69	100	67	80	75
Tobramycin	48	69	83#	50#	100	67	70	NT
Meropenem	49	68	75	56	33	67	80	100
Imipenem	47	67	75	57	33	67	80	100
Ciprofloxacin	39	71	75	52	33	67	90	100
Levofloxacin	39	70	74	25#	33	67	NT	100
Polymyxin	96	95	100#	100#	NT	100	100	NT
Aztreonam	53	47	25	NT	NT	67	100	NT

1 laboratory only

NT: Not tested

***Acinetobacter baumannii*: BLOODCULTURES**

Percentage Susceptible								
(Number of laboratories)	Jhb (3)	Pta (3)	Dbn (2)	CT (2)	PE (1)	EL (1)	Bfn (1)	Whk (1)
n = Total of isolates	72	66	31	11	3	2	2	1
Ceftazidime	26	24	27	53	50	0	100	100
Cefepime	28	28	31	28	50	0	100	100
Pip/tazobactam	28	28	39	28	50	50	100	100
Amikacin	57	84	69	100	0	100	100	NT
Tobramycin	76	97	100#	50#	50	100	100	NT
Meropenem	39	32	46	28	50	100	100	NT
Imipenem	39	28	47	28	50	100	100	100
Ciprofloxacin	31	31	44	61	50	100	100	100
Levofloxacin	31	31	50#	50#	50	100	NT	NT
Polymyxin	99	96	50	100	NT	NT	NT	NT
Aztreonam	4	6	0	NT	NT	NT	NT	NT

Incidence

(Number of laboratories)	Jhb (3)	Pta (2)	Dbn (2)	CT (2)	PE (1)	EL (1)	Bfn (1)	Whk (1)
% ESBL production (All sources):								
<i>Klebsiella</i> spp (n)	44 (2916)	40 (2481)	19 (2101)	32 (602)	32 (257)	37 (122)	32 (334)	12 (68)
<i>Enterobacter</i> spp (n)	19 (1113)	19 (979)	12 (1342)	21 (321)	25 (352)	12 (77)	11 (170)	-
<i>E. coli</i> (n)	5(11916)	4 (7542)	3 (7394)	3 (1285)	0 (877)	2 (550)	4 (830)	1 (578)

% Methicillin Resistance:								
<i>S.aureus</i> (n)	28 (5046)	22 (3402)	21 (1988)	24 (2354)	17 (583)	11 (379)	13 (465)	5 (205)
Coagulase negative Staphylococci (n)	69 (3981)	67 (3099)	39 (1211)	69 (524)	68 (513)	61 (238)	75 (700)	43 (63)

1 laboratory only

NT: Not tested

M.tuberculosis

(Number of laboratories)	Percentage Susceptible							
	Jhb (2)	Pta (2)	Dbn (1)	CT (1)	PE (2)	EL (1)	Bfn (2)	Whk (1)
Number of isolates		1480	612	794				
Rifampicin		91	92	93				
Isoniazid		87	88	87				
Ethambutol		96	96	95				
Streptomycin		70	98	93				
PZA		NT	NT	NT				
Ethionamide		54#	NT	47				
Amikacin		NT	98	NT				
Kanamycin		88#	NT	84				
Ofloxacin		40#	NT	49				
Ciprofloxacin			98	NT				