

Number of patients with blood culture specimen collected, stratified by age group and surveillance year

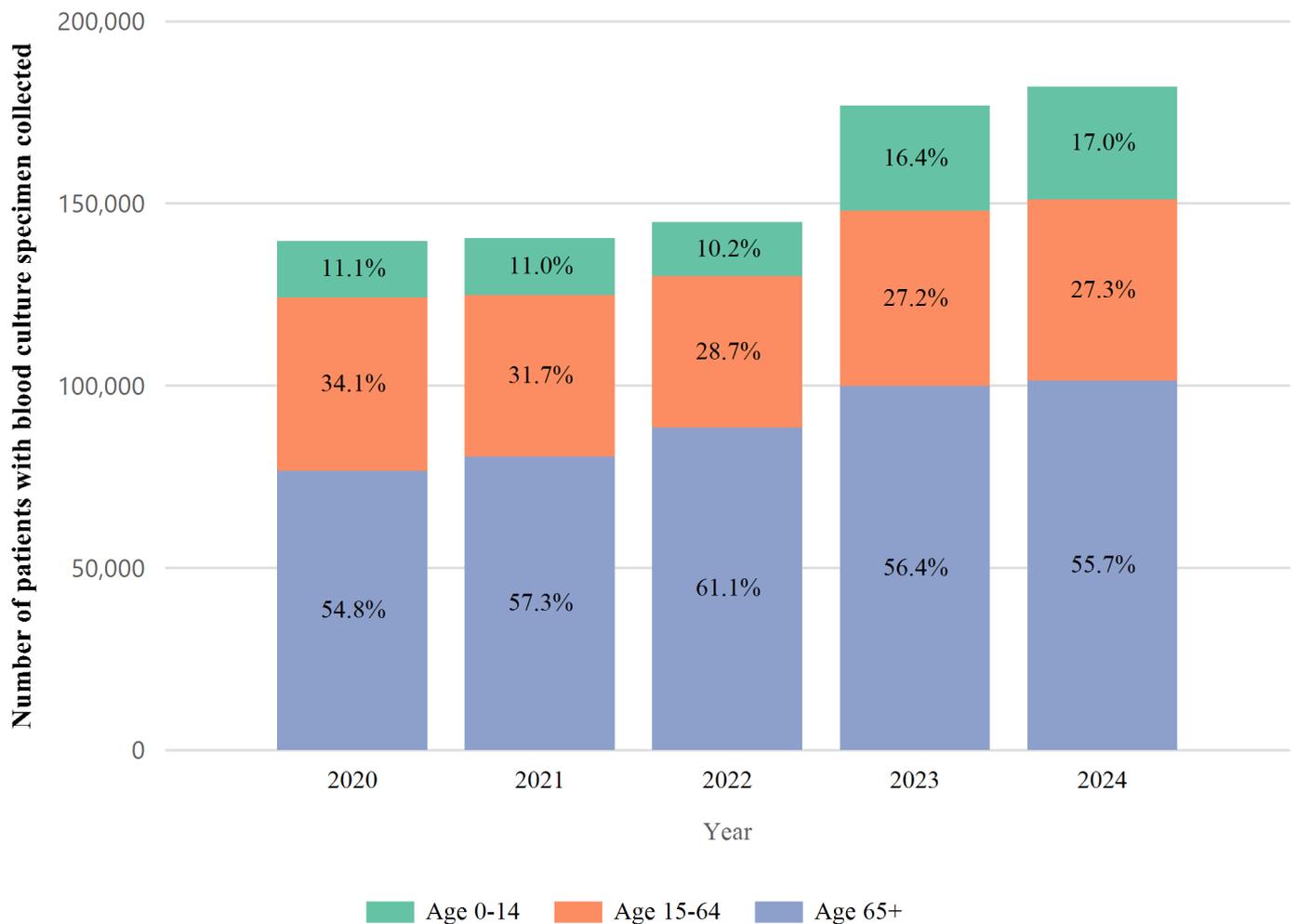
Year	Age 0-14		Age 15-64		Age 65+		Total	
	Patients Count*	%†	Patients Count*	%†	Patients Count*	%†	Patients Count*	%
2020	15,000	11.1%	48,000	34.1%	77,000	54.8%	140,000	100%
2021	16,000	11.0%	44,000	31.7%	80,000	57.3%	140,000	100%
2022	15,000	10.2%	42,000	28.7%	89,000	61.1%	145,000	100%
2023	29,000	16.4%	48,000	27.2%	100,000	56.4%	177,000	100%
2024	31,000	17.0%	50,000	27.3%	101,000	55.7%	182,000	100%

* Patient headcounts were rounded to the nearest thousand

† Percentages were rounded to one decimal place

§ Patient headcount >0 and <500

Number of patients with blood culture specimen collected, stratified by age group and surveillance year



**Number of patients with blood culture specimen collected,
stratified by age group and surveillance year**

Year	Prevalence of positive blood culture (%) (95%CI)			
	Age 0-14	Age 15-64	Age 65+	Total
2020	300 / 15,500	4,100 / 47,600	11,500 / 76,600	15,900 / 139,700
	(2.1%)	(8.6%)	(15.0%)	(11.4%)
	(1.8%-2.3%)	(8.4%-8.9%)	(14.7%-15.2%)	(11.2%-11.5%)
2021	300 / 15,500	4,100 / 44,400	11,800 / 80,400	16,100 / 140,400
	(1.6%)	(9.2%)	(14.7%)	(11.5%)
	(1.5%-1.9%)	(8.9%-9.4%)	(14.4%-14.9%)	(11.3%-11.7%)
2022	200 / 14,800	3,700 / 41,500	11,100 / 88,500	15,000 / 144,800
	(1.7%)	(8.8%)	(12.6%)	(10.4%)
	(1.5%-1.9%)	(8.5%-9.1%)	(12.4%-12.8%)	(10.2%-10.5%)
2023	300 / 29,000	3,800 / 48,100	11,800 / 99,800	15,900 / 176,800
	(1.2%)	(8.0%)	(11.8%)	(9.0%)
	(1.0%-1.3%)	(7.7%-8.2%)	(11.6%-12.0%)	(8.9%-9.1%)
2024	400 / 30,900	3,800 / 49,700	12,200 / 101,300	16,400 / 182,000
	(1.1%)	(7.7%)	(12.1%)	(9.0%)
	(1.0%-1.3%)	(7.5%-7.9%)	(11.9%-12.3%)	(8.9%-9.2%)

Patient headcounts were rounded to the nearest hundred

Percentages were rounded to one decimal place

§ Patient headcount >0 and <50

Non susceptibility percentage of *Escherichia coli* for different antimicrobials

		Non-susceptibility % [†] (95% CI [†]) (Numerator*/Denominator*)					
(Total headcount)* ^{‡¶}	Location of Onset	2020 (6600)	2021 (6400)	2022 (5600)	2023 (6300)	2024 (6500)	P-Value**
<i>amikacin</i>	Hospital	0.9% (0.5%-1.6%) (\$/1000)	1.1% (0.6%-1.9%) (\$/1000)	2.1% (1.3%-3.2%) (\$/900)	4.7% (3.6%-6.2%) (100/1100)	7.4% (6.0%-9.1%) (100/1100)	↑ <0.01
<i>amoxicillin and beta-lactamase inhibitor</i>	Hospital	37.0% (34.1%-40.0%) (400/1000)	41.1% (38.2%-44.2%) (400/1000)	45.1% (41.9%-48.3%) (400/900)	41.1% (38.2%-44.0%) (400/1100)	44.2% (41.3%-47.1%) (500/1100)	↑ <0.01
<i>ampicillin</i>	Hospital	85.6% ^{††} (82.8%-88.0%) (600/700)	86.0% (83.2%-88.3%) (600/700)	84.1% ^{††} (81.0%-86.7%) (500/600)	86.7% ^{††} (84.0%-89.0%) (600/700)	86.9% (84.4%-89.1%) (700/800)	-
<i>cefepime</i>	Hospital	19.9% (17.5%-22.6%) (200/900)	19.8% (17.5%-22.4%) (200/1000)	21.4% (18.9%-24.2%) (200/900)	26.0% (23.3%-28.8%) (300/1000)	24.6% (22.0%-27.3%) (300/1000)	↑ <0.01
<i>cefotaxime</i>	Hospital	35.0% (31.9%-38.2%) (300/900)	35.3% (32.2%-38.6%) (300/800)	38.4% (35.1%-41.9%) (300/800)	39.6% (36.4%-42.8%) (300/900)	39.3% (36.2%-42.6%) (400/900)	↑ <0.01
<i>ceftazidime</i>	Hospital	17.4% (14.9%-20.3%) (100/800)	18.4% (15.9%-21.3%) (100/800)	20.3% (17.5%-23.5%) (100/700)	22.0% (19.2%-25.0%) (200/800)	21.2% (18.6%-24.1%) (200/800)	↑ <0.01
<i>cefuroxime</i>	Hospital	39.0% (36.1%-42.0%) (400/1000)	39.4% (36.4%-42.4%) (400/1000)	40.9% (37.8%-44.1%) (400/900)	43.8% (40.8%-46.8%) (500/1100)	43.6% (40.7%-46.5%) (500/1100)	↑ <0.01
<i>ertapenem</i>	Hospital	1.0% (0.5%-1.8%) (\$/900)	0.9% (0.5%-1.8%) (\$/900)	2.0% (1.2%-3.2%) (\$/800)	2.2% (1.4%-3.3%) (\$/1000)	2.7% (1.9%-4.0%) (\$/1000)	↑ <0.01
<i>gentamicin</i>	Hospital	29.4% (26.7%-32.2%) (300/1000)	29.2% (26.5%-32.1%) (300/1000)	30.4% (27.5%-33.4%) (300/900)	29.4% (26.7%-32.2%) (300/1100)	26.2% (23.7%-28.8%) (300/1100)	-
<i>imipenem and cilastatin</i>	Hospital	0.5% ^{††} (0.2%-1.4%) (\$/600)	1.6% ^{††} (0.8%-3.2%) (\$/400)	2.6% ^{††} (1.4%-4.8%) (\$/400)	4.3% ^{††} (2.7%-6.7%) (\$/400)	4.0% ^{††} (2.6%-6.2%) (\$/500)	↑ <0.01

Non susceptibility percentage of *Escherichia coli* for different antimicrobials

	Location of Onset	Non-susceptibility %† (95% CI†) (Numerator*/Denominator*)					P-Value**
		2020 (6600)	2021 (6400)	2022 (5600)	2023 (6300)	2024 (6500)	
<i>levofloxacin</i>	Hospital	45.9% (42.8%-49.0%) (500/1000)	46.6% (43.5%-49.8%) (500/1000)	45.5% (42.2%-48.7%) (400/900)	44.9% (41.9%-47.9%) (500/1000)	46.4% (43.4%-49.3%) (500/1100)	-
<i>piperacillin and beta-lactamase inhibitor</i>	Hospital	10.7% (8.9%-12.8%) (100/1000)	10.3% (8.6%-12.4%) (100/1000)	15.9% (13.7%-18.5%) (100/900)	18.3% (15.9%-20.9%) (200/900)	17.6% (15.4%-20.2%) (200/1000)	↑ <0.01

* Patient headcounts were rounded to the nearest hundred

† Percentages were rounded to one decimal place

‡ Total headcount refers to annual number of patients with particular organism isolated from blood/urine/stool

§ Patient headcount >0 and <50

¶ Compare with deduplication without consideration on location of onset, number of isolates selected for analysis increases because isolates from both hospital-onset and community-onset was selected for each patient, if available.

†† Since the susceptibility test was performed for less than 70% of isolates, readers should interpret the findings with caution.

** P-value was calculated using Cochran-Armitage Test to examine whether a trend with statistical significance exists, only trends with statistical significance were reported.

Legend: ↑ Increasing trend; ↓ Decreasing trend

Note:

Dataset was de-duplicated with consideration on location of onset.

Proportion confidence intervals were calculated using the Wilson method.

Non-susceptibility percentages calculated from less than 10 isolates (after de-duplication) were excluded from analysis.

The CLSI released revised fluoroquinolones interpretive criteria for Enterobacteriaceae (except *Salmonella* spp.) in 2019, and revised piperacillin/tazobactam interpretive criteria for Enterobacteriaceae in 2022. These updates may have contributed to the observed increase in subsequent years compared to the years prior to the criteria changes.

Revised colistin interpretive criteria for *Acinetobacter* spp. was released by CLSI in 2020. The increase in 2020 onwards may be contributed by the change in CLSI criteria.

Non susceptibility percentage of *Klebsiella pneumoniae* for different antimicrobials

(Total headcount)*‡¶	Location of Onset	Non-susceptibility %† (95% CI†) (Numerator*/Denominator*)					P-Value**
		2020 (1900)	2021 (2100)	2022 (2000)	2023 (2100)	2024 (2300)	
amikacin	Community	0.3% (0.1%-0.8%) (\$/1500)	0.2% (0.1%-0.6%) (\$/1700)	0.6% (0.3%-1.2%) (\$/1600)	1.7% (1.1%-2.4%) (\$/1600)	1.6% (1.1%-2.3%) (\$/1700)	↑ <0.01
amoxicillin and beta-lactamase inhibitor	Community	16.5% (14.7%-18.5%) (200/1500)	15.9% (14.2%-17.8%) (300/1700)	15.8% (14.1%-17.7%) (200/1600)	17.9% (16.0%-19.8%) (300/1600)	17.2% (15.5%-19.1%) (300/1700)	-
cefepime	Community	5.5% (4.4%-6.8%) (100/1400)	5.6% (4.6%-6.8%) (100/1600)	6.8% (5.6%-8.1%) (100/1600)	7.8% (6.5%-9.2%) (100/1500)	7.8% (6.6%-9.2%) (100/1600)	↑ <0.01
cefotaxime	Community	12.4% (10.6%-14.3%) (200/1200)	12.7% (11.0%-14.5%) (200/1400)	14.1% (12.3%-16.0%) (200/1400)	13.6% (11.8%-15.5%) (200/1300)	14.5% (12.7%-16.4%) (200/1400)	↑ <0.05
ceftazidime	Community	9.9% (8.4%-11.7%) (100/1300)	7.8% (6.5%-9.4%) (100/1300)	8.8% (7.3%-10.5%) (100/1200)	8.8% (7.3%-10.6%) (100/1200)	9.5% (8.0%-11.2%) (100/1300)	-
cefuroxime	Community	15.4% (13.7%-17.4%) (200/1500)	15.4% (13.7%-17.2%) (300/1700)	15.2% (13.5%-17.1%) (200/1600)	16.9% (15.1%-18.8%) (300/1600)	17.5% (15.8%-19.4%) (300/1700)	↑ <0.05
gentamicin	Community	4.6% (3.6%-5.8%) (100/1500)	4.6% (3.7%-5.7%) (100/1700)	5.2% (4.2%-6.4%) (100/1600)	6.2% (5.1%-7.5%) (100/1600)	5.6% (4.6%-6.9%) (100/1700)	↑ <0.05
imipenem and cilastatin	Community	0.5% (0.2%-1.1%) (\$/1000)	0.4% †† (0.1%-1.0%) (\$/900)	1.3% †† (0.7%-2.4%) (\$/800)	1.0% †† (0.5%-2.0%) (\$/700)	1.4% †† (0.8%-2.4%) (\$/800)	↑ <0.01
levofloxacin	Community	14.0% (12.3%-15.8%) (200/1500)	13.2% (11.6%-14.9%) (200/1600)	11.1% (9.6%-12.7%) (200/1600)	12.8% (11.2%-14.6%) (200/1500)	12.3% (10.8%-13.9%) (200/1600)	-
meropenem	Community	0.2% (<0.05%-0.6%) (\$/1200)	0.3% (0.1%-0.7%) (\$/1200)	0.4% (0.1%-0.9%) (\$/1100)	0.7% †† (0.4%-1.5%) (\$/1100)	0.9% †† (0.5%-1.6%) (\$/1100)	↑ <0.01

Non susceptibility percentage of *Klebsiella pneumoniae* for different antimicrobials

	Location of Onset	Non-susceptibility %† (95% CI†) (Numerator*/Denominator*)					P-Value**
		2020 (1900)	2021 (2100)	2022 (2000)	2023 (2100)	2024 (2300)	
(Total headcount)*‡¶							
piperacillin and beta-lactamase inhibitor	Community	4.0% (3.1%-5.1%) (100/1400)	4.2% (3.3%-5.3%) (100/1600)	11.7% (10.1%-13.4%) (200/1500)	11.7% (10.0%-13.6%) (100/1200)	8.6% (7.3%-10.2%) (100/1400)	↑ <0.01

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§ Patient headcount >0 and <50

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Non susceptibility percentage of *Klebsiella pneumoniae* for different antimicrobials

(Total headcount)* ^{‡¶}	Location of Onset	Non-susceptibility % [†] (95% CI [†]) (Numerator*/Denominator*)					P-Value**
		2020 (1900)	2021 (2100)	2022 (2000)	2023 (2100)	2024 (2300)	
amikacin	Hospital	1.2% (0.5%-2.7%) (\$/400)	2.3% (1.3%-4.0%) (\$/500)	2.4% (1.4%-4.2%) (\$/500)	3.2% (2.1%-5.1%) (\$/600)	3.8% (2.5%-5.5%) (\$/600)	↑ <0.01
amoxicillin and beta-lactamase inhibitor	Hospital	39.4% (34.9%-44.1%) (200/400)	34.5% (30.5%-38.7%) (200/500)	40.0% (35.8%-44.3%) (200/500)	37.8% (33.8%-41.9%) (200/600)	37.4% (33.7%-41.2%) (200/600)	-
cefepime	Hospital	18.0% (14.5%-22.1%) (100/400)	16.4% (13.5%-19.9%) (100/500)	22.7% (19.2%-26.6%) (100/500)	20.7% (17.5%-24.4%) (100/500)	19.9% (16.9%-23.3%) (100/600)	-
cefotaxime	Hospital	28.7% (24.2%-33.7%) (100/300)	32.6% (28.3%-37.3%) (100/400)	34.7% (30.2%-39.5%) (100/400)	33.8% (29.7%-38.3%) (200/500)	31.2% (27.4%-35.3%) (200/500)	-
ceftazidime	Hospital	24.6% (20.5%-29.3%) (100/400)	23.8% (19.8%-28.3%) (100/400)	24.8% (20.7%-29.5%) (100/400)	22.8% (19.0%-27.1%) (100/400)	21.0% (17.5%-24.9%) (100/500)	-
cefuroxime	Hospital	38.2% (33.8%-42.9%) (200/400)	35.2% (31.3%-39.4%) (200/500)	39.8% (35.6%-44.1%) (200/500)	39.2% (35.2%-43.3%) (200/600)	36.2% (32.5%-39.9%) (200/600)	-
gentamicin	Hospital	10.4% (7.8%-13.6%) (\$/400)	11.9% (9.4%-14.9%) (100/500)	15.5% (12.6%-18.9%) (100/500)	13.3% (10.7%-16.4%) (100/600)	14.4% (11.9%-17.3%) (100/600)	↑ <0.05
imipenem and cilastatin	Hospital	4.0% ^{††} (2.2%-6.9%) (\$/300)	6.7% ^{††} (4.1%-10.7%) (\$/200)	6.8% ^{††} (4.1%-11.0%) (\$/200)	3.7% ^{††} (2.0%-6.9%) (\$/200)	6.2% ^{††} (3.9%-9.7%) (\$/300)	-
levofloxacin	Hospital	29.4% (25.3%-34.0%) (100/400)	28.7% (24.9%-32.7%) (100/500)	29.6% (25.7%-33.8%) (100/500)	27.8% (24.2%-31.7%) (200/500)	25.9% (22.6%-29.5%) (200/600)	-
meropenem	Hospital	4.6% (2.9%-7.2%) (\$/400)	4.3% (2.7%-6.7%) (\$/400)	4.0% (2.5%-6.4%) (\$/400)	3.1% (1.8%-5.2%) (\$/400)	4.5% (3.0%-6.8%) (\$/500)	-

Non susceptibility percentage of *Klebsiella pneumoniae* for different antimicrobials

	Location of Onset	Non-susceptibility %† (95% CI†) (Numerator*/Denominator*)					P-Value**
		2020 (1900)	2021 (2100)	2022 (2000)	2023 (2100)	2024 (2300)	
<i>(Total headcount)*‡¶</i>							
<i>piperacillin and beta-lactamase inhibitor</i>	Hospital	15.7% (12.5%-19.6%) (100/400)	14.9% (12.1%-18.3%) (100/500)	26.6% (22.9%-30.7%) (100/500)	29.8% (25.7%-34.3%) (100/400)	26.2% (22.6%-30.1%) (100/500)	↑ <0.01
<i>sulfamethoxazole and trimethoprim</i>	Hospital	40.4% †† (35.1%-46.0%) (100/300)	35.2% †† (30.2%-40.5%) (100/300)	38.7% †† (33.4%-44.2%) (100/300)	40.5% †† (35.4%-45.8%) (100/300)	42.5% †† (37.9%-47.3%) (200/400)	-

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