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1 April 2025 – 30 June 2025

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Contents

Data Summary

This report provides an update on data submitted to the National Alert System for Critical Antimicrobial Resistances (CARAlert) for the reporting period: 1 April 2025 to 30 June 2025, and complements previous analyses of and updates on CARAlert data and the CARAlert Data Explorer.

National overview

- The total number of critical antimicrobial resistances (CARs) reported was down 3.2% compared to the previous three-month period (*n* = 999 versus *n* = 1,032).
- A little under one-half of the CARs reported were carbapenemase-producing *Enterobacterales* (CPE) (including those with ribosomal methyltransferase) (439/999, 43.9%).
- The total number of CPE (either alone or in combination with other CARs) reported to date this year, compared with the same period last year, increased by 12.7% (*n* = 904 versus *n* = 802).
- Azithromycin-nonsusceptible (low-level resistance, minimum inhibitory concentration [MIC] < 256 mg/L) *Neisseria gonorrhoeae* was the second most reported CAR (418/999, 41.8%).
- Multidrug-resistant (MDR) *Shigella* species was the third most reported CAR (34/999, 3.4%). The number of reports decreased compared to the previous three months (*n* = 34 versus *n* = 62, down 45.2%).
- Fourteen ceftriaxone-nonsusceptible *N. gonorrhoeae* were reported, one of which were also azithromycin-nonsusceptible (high-level resistance, MIC ≥ 256 mg/L).
- Where the setting was known, just over one-half of CARs were reported from community settings (482/909, 53.0%). There were 427 (47.0%) reports from hospitals, and no reports from aged care homes.

Carbapenemase-producing *Enterobacterales*

- The total number of CPE (either alone or in combination with other CARs) decreased compared to the previous three-month period (*n* = 439 versus *n* = 465, down 5.6%).
- NDM (180/439, 41.0%), IMP (163/439, 37.1%), OXA-48-like (58/439, 13.2%), NDM+OXA-48-like (15/439, 3.4%) and KPC (9/439, 2.1%) types accounted for 96.8% of all CPE reported during this period.
- The total number of NDM-types reported (either alone or co-produced with other carbapenemase types) decreased compared to the previous three months (*n* = 200 versus *n* = 233, down 14.2%), most notably in South Australia (SA) (*n* = 24 versus *n* = 55, down 56.4%).
- The total number of IMP-types reported increased from compared to the previous three months (*n* = 163 versus *n* = 147, up 10.9%).
- The total number of any OXA-48-like types reported decreased compared to the previous three months (*n* = 75 versus *n* = 101, down 25.7%).
- Nine KPC-producing *Enterobacterales* were reported; four *Klebsiella pneumoniae* from Victoria, two *K. pneumoniae* from Queensland, two *Citrobacter freundii* complex isolates from Victoria, and one *K. oxytoca* from Queensland. In addition, one *K. pneumoniae*

isolate co-producing KPC, NDM, and OXA-48-ilke was reported from SA, and one *E. coli* co-producing KPC and OXA-48-like was reported from Victoria.

- Where the setting was known, 84.8% (346/408) of CPE were reported from hospitals and 15.2% (62/408) were reported from the community.
- Twenty-seven hospitals had more than one report of NDM-types; these were in New South Wales (NSW) (*n* = 11), Victoria (*n* = 7), Queensland (*n* = 4), SA (*n* = 2), Western Australia (WA) (*n* = 2) and the Northern Territory (*n* = 1). Seven hospitals from NSW (*n* = 3), Victoria (*n* = 2), and SA (*n* = 2) had five or more reports.
- One hospital from SA reported 13 isolates (all from screens) with NDM types.
- Eighteen hospitals (NSW *n* = 8, Queensland *n* = 8, Victoria *n* = 2) had more than two reports of IMP-types. A further 15 hospitals had two notifications of IMP-types: NSW (*n* = 8), Queensland (*n* = 4), WA (*n* = 2), and Victoria (*n* = 1).

Salmonella and *Shigella* species

- There were 33 ceftriaxone-nonsusceptible *Salmonella* species reported during this reporting period, from Victoria (*n* = 21), WA (*n* = 6), SA (*n* = 3), and one each from NSW, Tasmania and the Australian Capital Territory (ACT). All non-typhoidal species (*n* = 31) either produced either an extended-spectrum β-lactamase (ESBL [25]) or a pAmpC (*n* = 6). Two *S*. Typhi were reported from Victoria (ESBL [1], pAmpC [1]).
- There were 34 MDR *Shigella* species reported in this period: 19 *S. sonnei*, 12 *S. flexneri*, and three *S. dysenteriae*. All *S. sonnei* isolates were ceftriaxone/cefotaxime-resistant and produced an ESBL. One-third of MDR *S. flexneri* were susceptible to ceftriaxone/cefotaxime (4/12, 33.3%).

Azithromycin-nonsusceptible (low-level resistance, MIC < 256 mg/L) *Neisseria gonorrhoeae*

- There was a slight increase in total number of reports of this CAR compared with the previous three-month reporting period (*n* = 418 versus *n* = 405, up 3.2%). Three-quarters of the reports were from Victoria (316/418, 75.6%).

Ceftriaxone- and/or azithromycin-nonsusceptible *Neisseria gonorrhoeae*

- There were 14 reports of ceftriaxone-nonsusceptible *N. gonorrhoeae*, up from nine in the previous three-month reporting period. The reports were from NSW (*n* = 12), one of which also had high-level resistance to azithromycin (MIC < 256 mg/L), and WA (*n* = 2).

Gentamicin-resistant *Neisseria gonorrhoeae*

- No gentamicin-resistant *N. gonorrhoeae* were reported in this period.

Ciprofloxacin-nonsusceptible *Neisseria meningitidis*

- There were two ciprofloxacin-nonsusceptible *N. meningitidis* reported from Victoria.

Carbapenemase-producing *Acinetobacter baumannii* complex and *Pseudomonas aeruginosa*

- Fifteen carbapenemase-producing *Acinetobacter baumannii* complex were reported during this period, up from eight in the previous three-months. The reports were from Victoria (*n* = 9), NSW (*n* = 4), SA (*n* = 1), and WA (*n* = 1).

- The number of carbapenemase-producing *Pseudomonas aeruginosa* reported was similar to the previous three months (*n* = 22 versus *n* = 21). Five different types were reported (NDM [7], GES [6], IMP [4], VIM [3], DIM [1]), and one isolate co-produced GES and NDM. The GES types were only reported from NSW.

Linezolid-resistant *Enterococcus* species

- Fifteen linezolid-resistant *Enterococcus* species were reported, up from 13 in the previous three-month reporting period. There were nine *E. faecalis* reports, from Victoria (*n* = 4) NSW (*n* = 3), Queensland (*n* = 1), and the ACT (*n* = 1); and six *E. faecium* reports, from NSW (*n* = 4) and Victoria (*n* = 2). Almost all *E. faecalis* (7/8) and three *E. faecium* harboured *optrA* genes; one *E. faecium* also had a 23S rRNA mutation(s). There were two *E. faecium* isolates with 23S rRNA mutations, and one *E. faecium* with a *cfr* gene.

Candida auris

- There were four *Candida auris* reports this reporting period (down from *n* = 5 in the previous three months). The reports were from SA (*n* = 3), and WA (*n* = 1).

Linezolid- or vancomycin-nonsusceptible *Staphylococcus aureus* complex

- There was one report of a linezolid-nonsusceptible Staphylococcus aureus complex isolate from Queensland.

Transmissible colistin resistance

- One *E. coli* isolate with transmissible colistin resistance (mcr-1.1) was reported from NSW during this period. This isolate also harboured a NDM gene.

Streptococcus pyogenes with reduced susceptibility to penicillin

- No cases of *Streptococcus pyogenes* with reduced susceptibility to penicillin were reported during this period.

National summary

Table 1 Number of critical antimicrobial resistances, by state and territory, 1 April 2025 – 30 June 2025, and year to date 2024 and 2025

Species	Critical resistance	State or Territory (April–June) 2025)								Quarterly			Year to date		
										2025	2025				
		NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Jan–Mar	Apr–Jun	Relative change*	2024	2025	Relative change*
Acinetobacter baumannii complex	Carbapenemase-producing	4	9	0	1	1	0	0	0	8	15	▲ 87.5%	22	23	▲ 4.5%
Candida auris	–	0	0	0	3	1	0	0	0	5	4	▼ 20.0%	7	9	▲ 28.6%
Enterobacterales	Carbapenemase-producing	178	98	75	31	24	2	4	3	428	415	▼ 3.0%	748	843	▲ 12.7%
	Carbapenemase- and ribosomal methyltransferase-producing	3	12	2	2	4	0	0	0	37	23	▼ 37.8%	54	60	▲ 11.1%
	Carbapenemase- producing and transmissible resistance to colistin	1	0	0	0	0	0	0	0	0	1	–	0	1	–
	Ribosomal methyltransferase-producing	0	0	1	0	0	0	0	0	2	1	▼ 50.0%	6	3	▼ 50.0%
	Transmissible resistance to colistin	0	0	0	0	0	0	0	0	0	0	–	0	0	–
Enterococcus species	Linezolid-resistant	7	6	1	0	0	0	0	1	13	15	▲ 15.4%	69	28	▼ 59.4%
Mycobacterium tuberculosis	Multidrug-resistant – at least rifampicin- and isoniazid-resistant strains	0	0	0	1	0	0	0	0	0	1	–	6	1	–
Neisseria gonorrhoeae	Azithromycin-nonsusceptible (low-level)†	31	316	31	3	36	0	0	1	405	418	▲ 3.2%	435	823	▲ 89.2%
	Azithromycin-nonsusceptible (high-level)§	0	0	0	0	0	0	0	0	0	0	–	25	0	▼ 100%
	Ceftriaxone-nonsusceptible	10	0	0	0	1	0	0	0	7	11	▲ 57.1%	19	18	▼ 5.3%
	Ceftriaxone-nonsusceptible and azithromycin-nonsusceptible (low-level) †	1	0	0	0	1	0	0	0	0	2	–	2	2	–
	Ceftriaxone-nonsusceptible and azithromycin nonsusceptible (high-level) §	1	0	0	0	0	0	0	0	2	1	–	4	3	–
	Gentamicin-resistant	0	0	0	0	0	0	0	0	0	0	–	0	0	–

Table 1 (continued)

Species	Critical resistance	State or territory (April–June 2025)								Quarterly			Year to date		
		NSW	Vicr	Old	SA	WA	Tas	NT	ACT	2025 Jan–Mar	2025 Apr–Jun	Relative change*	2024	2025	Relative change*
Neisseria meningitidis	Ciprofloxacin-nonsusceptible	0	2	0	0	0	0	0	0	1	2	–	3	3	–
Pseudomonas aeruginosa	Carbapenemase-producing	11	5	1	3	2	0	0	0	21	22	▲ 4.8%	38	43	▲ 13.2%
Salmonella species	Ceftriaxone-nonsusceptible	1	21	0	3	6	1	0	1	40	33	▼ 17.5%	39	73	▲ 87.2%
Shigella species	Multidrug-resistant	10	9	10	3	2	0	0	0	62	34	▼ 45.2%	199	96	▼ 51.8%
Staphylococcus aureus complex	Linezolid-nonsusceptible	0	0	1	0	0	0	0	0	0	1	–	0	1	–
	Vancomycin-nonsusceptible	0	0	0	0	0	0	0	0	1	0	–	0	1	–
Streptococcus pyogenes	Penicillin reduced susceptibility	0	0	0	0	0	0	0	0	0	0	–	0	0	–
	Total (reported by 10 August 2025)	258	478	122	50	78	3	4	6	**1,032**	**999**	**▼ 3.2%**	**1,676**	**2,031**	**▲ 21.2%**

CAR = critical antimicrobial resistances; MIC = minimum inhibitory concentration; ▲ = increase; ▼ = decrease; – = not applicable

* Relative change = absolute change between period in 2024 and same period in 2025, for each CAR, expressed as a percentage of 2024 base, where three or more CARs reported per reporting period

† Azithromycin MIC < 256 mg/L

§ Azithromycin MIC ≥ 256 mg/L

Note: For this report, transmissible resistance to colistin refers to the presence of *mcr* genes other than *mcr-9*. This variant is not associated with a colistin resistant phenotype but is typically found on H12 plasmids which may carry $bla_{\text{IMP-4}}$.

Table 2 Number of critical antimicrobial resistance isolates, by setting, national, 1 April 2025 – 30 June 2025

Species	Critical resistance	Setting					Total
		Public hospital	Private hospital	Aged care home	Community	Unknown	
Acinetobacter baumannii complex	Carbapenemase-producing	13	0	0	1	1	15
Candida auris	–	4	0	0	0	0	4
Enterobacterales	Carbapenemase-producing	309	21	0	54	31	415
	Carbapenemase- and ribosomal methyltransferase-producing	14	1	0	8	0	23
	Carbapenemase- producing and transmissible resistance to colistin	1	0	0	0	0	1
	Ribosomal methyltransferase-producing	1	0	0	0	0	1
	Transmissible resistance to colistin	0	0	0	0	0	0
Enterococcus species	Linezolid-resistant	12	0	0	3	0	15
Mycobacterium tuberculosis	Multidrug-resistant – at least rifampicin- and isoniazid-resistant strains	1	0	0	0	0	1
Neisseria gonorrhoeae	Azithromycin-nonsusceptible (low-level)*	10	0	0	368	40	418
	Azithromycin-nonsusceptible (high-level)†	0	0	0	0	0	0
	Ceftriaxone-nonsusceptible	0	0	0	1	10	11
	Ceftriaxone-nonsusceptible and azithromycin-nonsusceptible (low-level)*	0	0	0	1	1	2
	Ceftriaxone-nonsusceptible and azithromycin-nonsusceptible (high-level)†	0	0	0	0	1	1
	Gentamicin-resistant	0	0	0	0	0	0
Neisseria meningitidis	Ciprofloxacin-nonsusceptible	0	0	0	2	0	2
Pseudomonas aeruginosa	Carbapenemase-producing	13	2	0	1	6	22
Salmonella species	Ceftriaxone-nonsusceptible	3	0	0	30	0	33
Shigella species	Multidrug-resistant	19	2	0	13	0	34
Staphylococcus aureus complex	Linezolid-nonsusceptible	1	0	0	0	0	1
	Vancomycin-nonsusceptible	0	0	0	0	0	0
Streptococcus pyogenes	Penicillin reduced susceptibility	0	0	0	0	0	0
	Total (reported by 10 August 2025)	**401**	**26**	**0**	**482**	**90**	**999**

* Azithromycin MIC < 256 mg/L

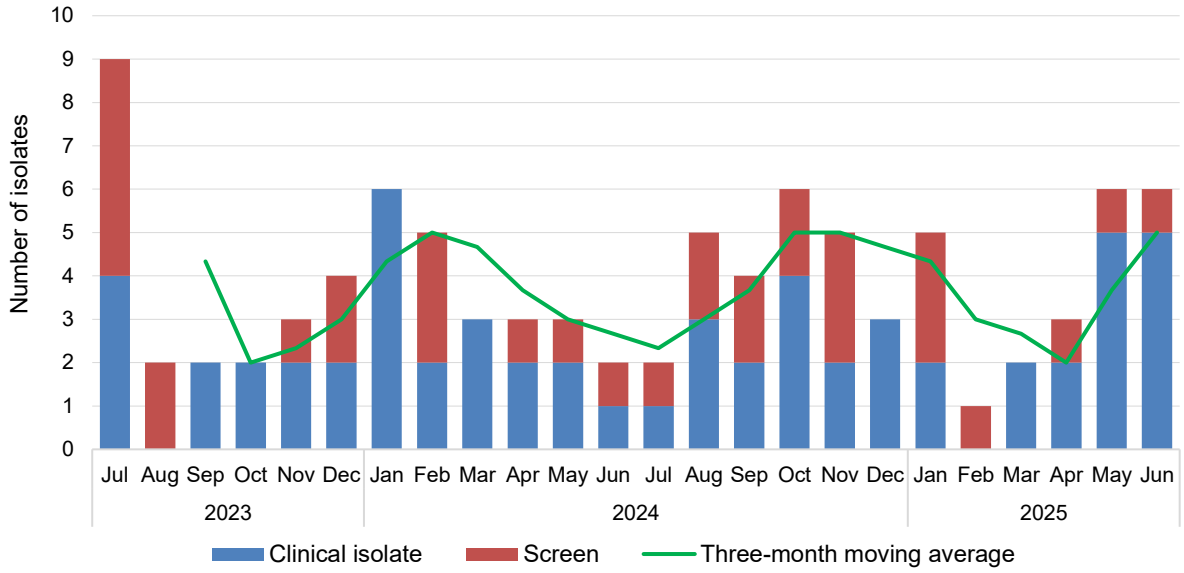
† Azithromycin MIC ≥ 256 mg/L

Summary by CAR

Acinetobacter baumannii complex

National data

Figure 1 Carbapenemase-producing *Acinetobacter baumannii* complex, 24-month trend by specimen type, national, 1 July 2023 – 30 June 2025



State and territory data

Figure 2 Carbapenemase-producing *Acinetobacter baumannii* complex, number reported by carbapenemase type and specimen type, by state and territory, 1 April 2025 – 30 June 2025

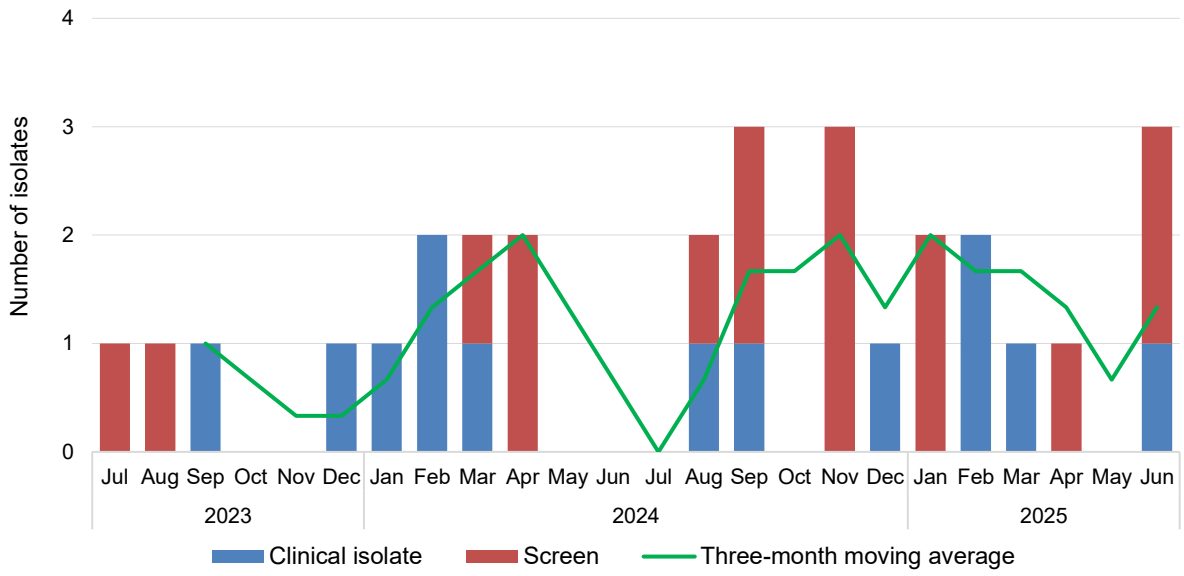
Table 3 Carbapenemase-producing *Acinetobacter baumannii* complex, number reported by setting, by state and territory, 1 April 2025 – 30 June 2025

Setting	State or territory								Total
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	
Total	4	9	0	1	1	0	0	0	15
Public hospital	3	9	0	0	1	0	0	0	13
Private hospital	0	0	0	0	0	0	0	0	0
Aged care home	0	0	0	0	0	0	0	0	0
Community	0	0	0	1	0	0	0	0	1
Unknown	1	0	0	0	0	0	0	0	1

Candida auris

National data

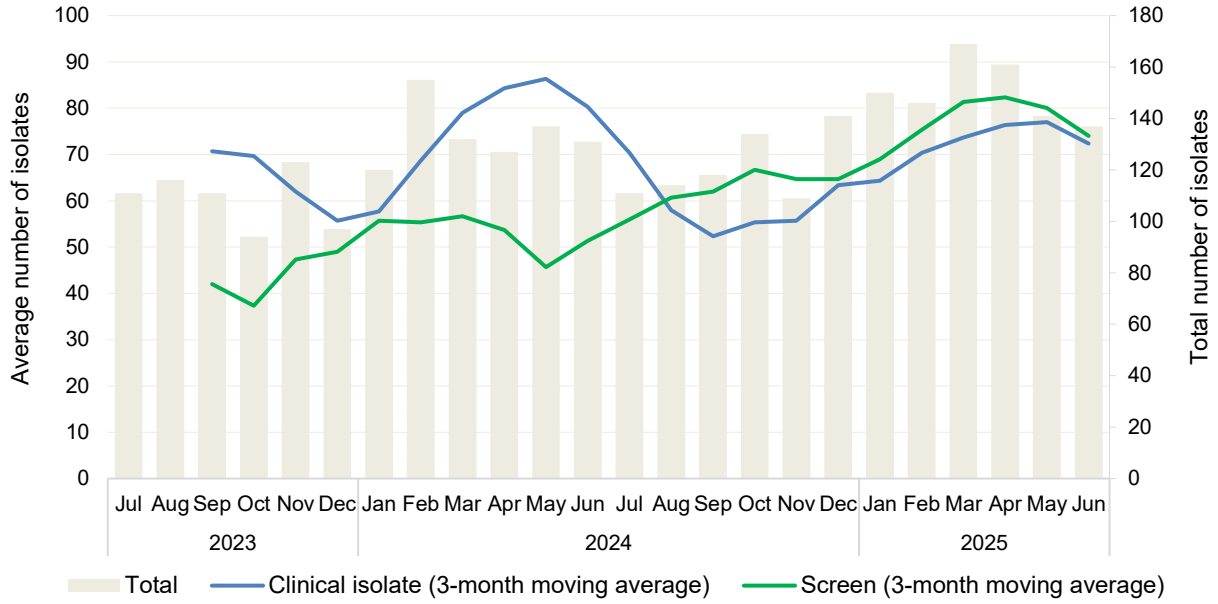
Figure 3 *Candida auris*, 24-month trend by specimen type, national, 1 July 2023–30 June 2025



Enterobacterales

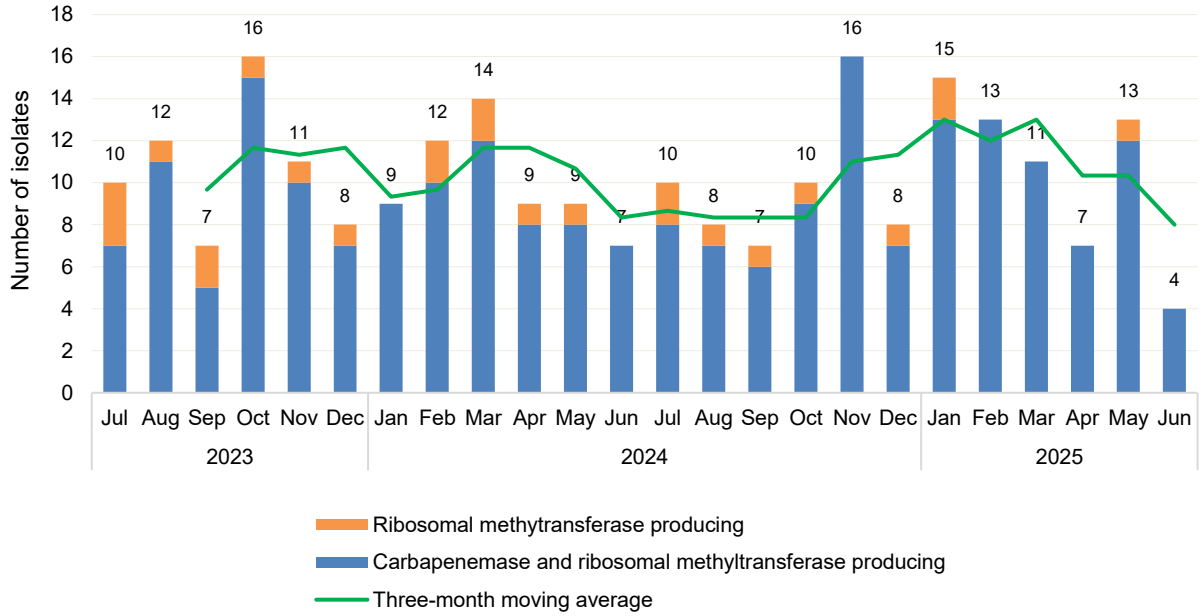
National data

Figure 4 Carbapenemase-producing *Enterobacterales**, 24-month trend by specimen type, national, 1 July 2023–30 June 2025



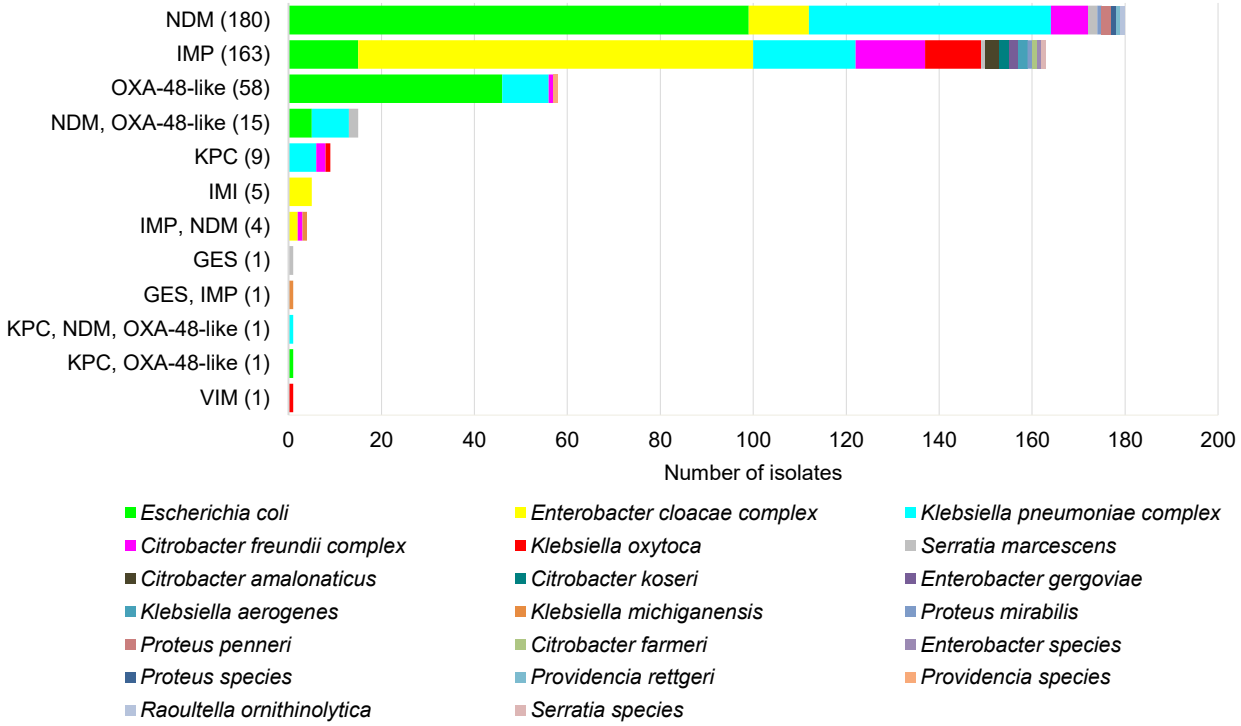
* Carbapenemase-producing alone or in combination with ribosomal methyltransferases or transmissible resistance to colistin

Figure 5 Ribosomal methyltransferase-producing *Enterobacterales**, 24-month trend, national, 1 July 2023–30 June 2025



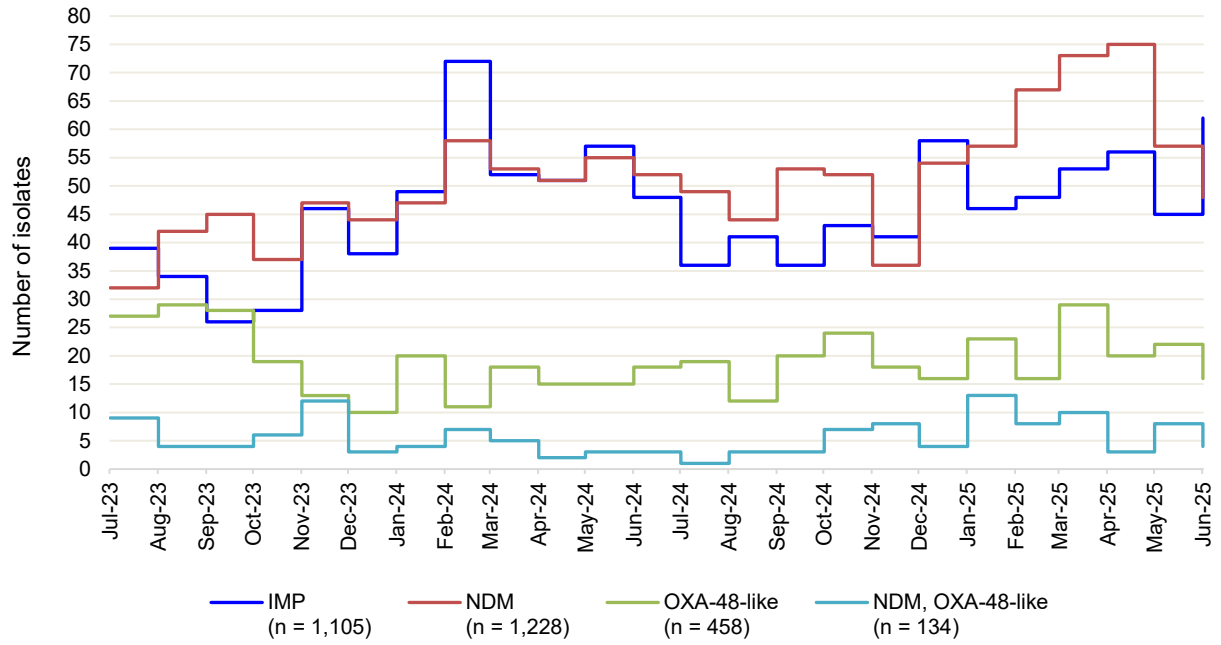
* Ribosomal methyltransferases alone, or in combination with carbapenemase(s)

Figure 6 Carbapenemase-producing *Enterobacterales**, number reported by carbapenemase type and species, national, 1 April 2025–30 June 2025



* Carbapenemase-producing (*n* = 415), carbapenemase and ribosomal methyltransferase-producing (*n* = 23), carbapenemase-producing and transmissible resistance to colistin (*n* = 1)

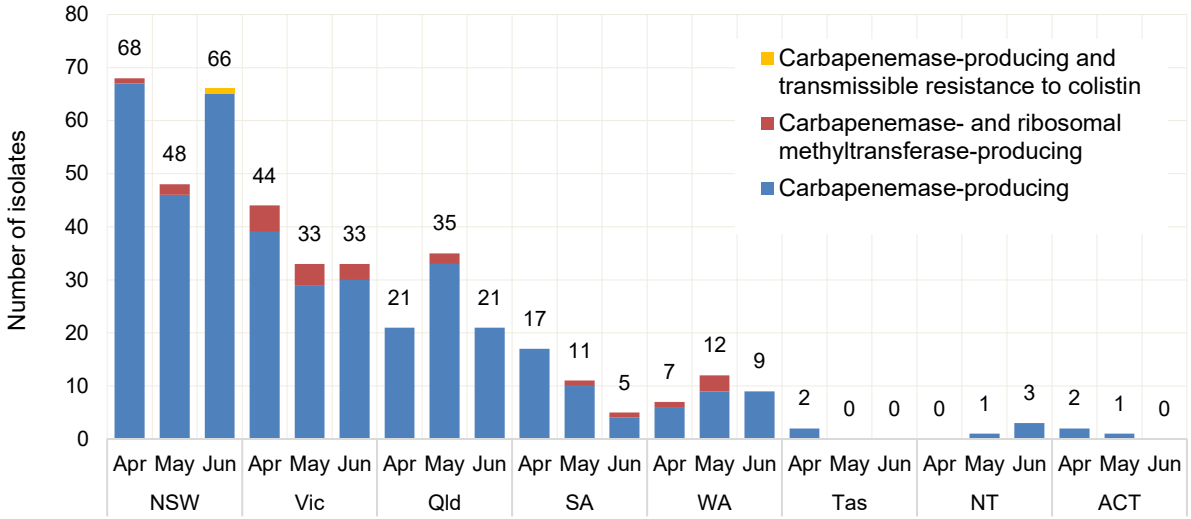
Figure 7 Top four reported carbapenemase types*, 24-month trend, national, 1 July 2023–30 June 2025



* Alone or in combination with another type for the reporting period

State and territory data

Figure 8 Carbapenemase-producing *Enterobacterales*,* number reported by month, state and territory, 1 April 2025 – 30 June 2025



* Carbapenemase-producing (n = 415), carbapenemase and ribosomal methyltransferase-producing (n = 23), carbapenemase-producing and transmissible resistance to colistin (n = 1)

Figure 9 Top four reported carbapenemase types from Enterobacterales, by state and territory and nationally, 24-month trend, (three-month moving average), 1 July 2023–30 June 2025

Type	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
IMP	34 14	7 1	17 5	0 0	3 0	0 0	0 0	1 0	58 29
NDM	19 8	26 12	10 3	18 1	4 1	2 0	1 0	1 0	72 33
OXA-48-like	7 3	18 5	3 0	3 0	3 0	0 0	1 0	1 0	28 14
NDM+OXA-48-like	3 0	4 0	2 0	1 0	2 0	0 0	0 0	1 0	10 2
All types	61 36	45 26	30 9	21 3	10 3	2 0	2 0	2 0	159 99

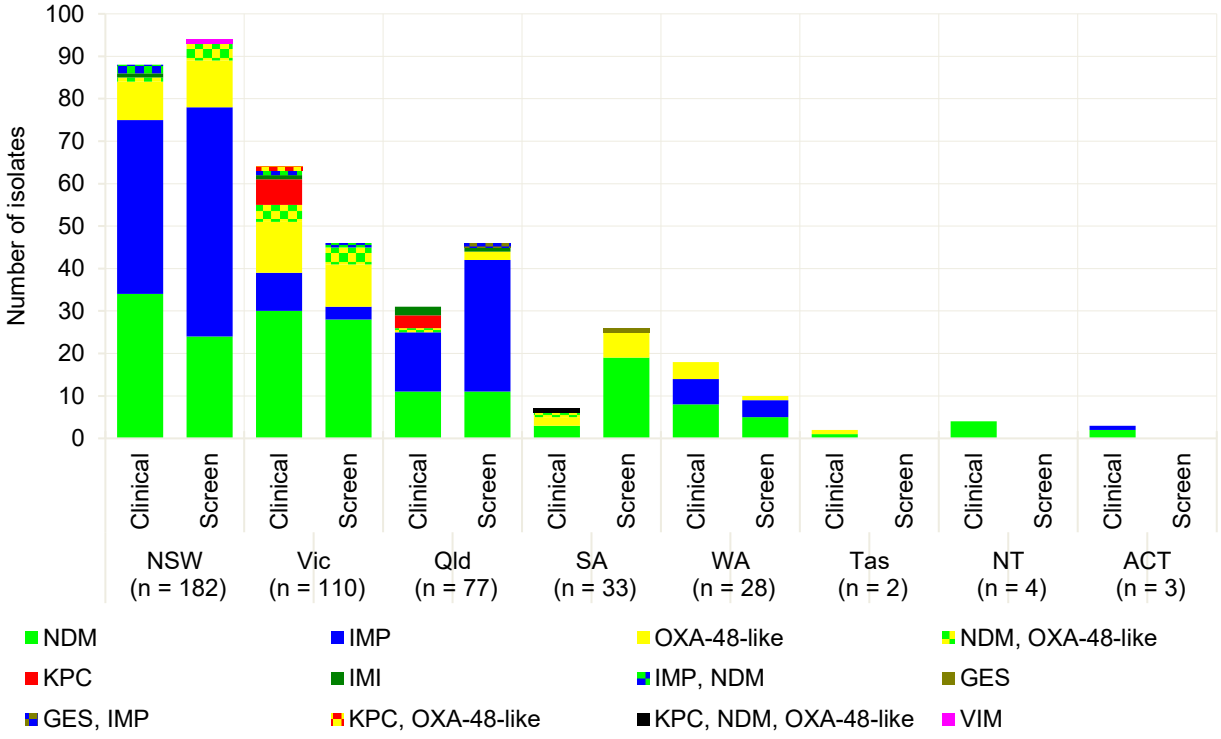
Straight green line in cell = no carbapenemase type for that state or territory during the reporting period;

Blank cell = maximum monthly average was one or less

Notes:

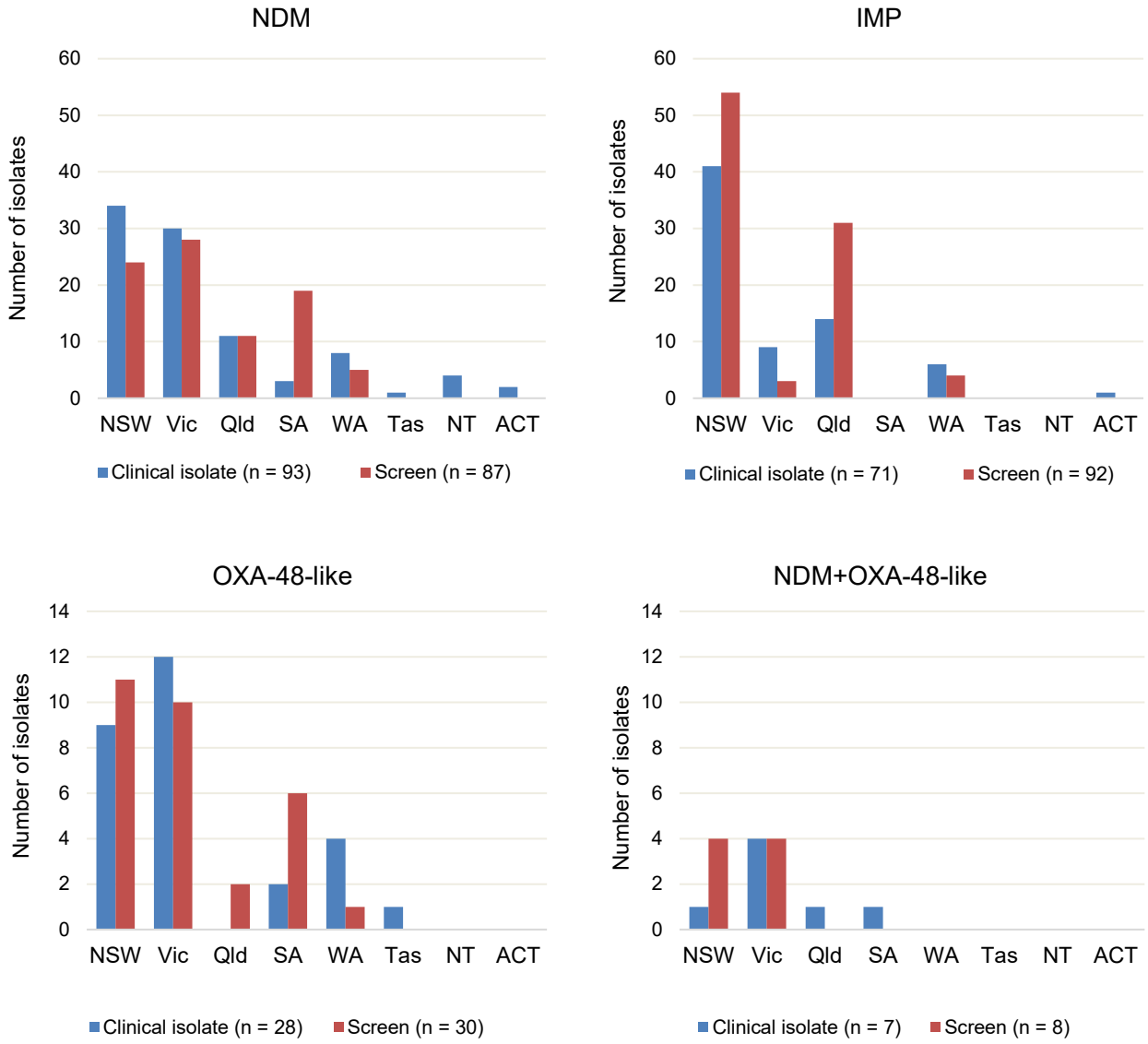
1. Line graphs represent three-month moving average for the period 1 July 2023 to 30 June 2025, for each type, where maximum monthly average was greater than one.
2. Numbers in each cell represent maximum (top) and minimum (bottom) monthly average.

Figure 10 Carbapenemase-producing *Enterobacterales**, number reported by carbapenemase type and specimen type, by state and territory, 1 April 2025 – 30 June 2025



* Carbapenemase-producing (*n* = 415); carbapenemase- and ribosomal methyltransferase-producing (*n* = 23); carbapenemase-producing and transferrable resistance to colistin (*n* = 1)

Figure 11 Top four reported carbapenemase-producing *Enterobacterales* types by specimen type, by state and territory, 1 April 2025 – 30 June 2025



Note: Other types include KPC (*n* = 9; NSW clinical [6], Qld clinical [3]); IMI (*n* = 5; NSW clinical [1]; Vic clinical [1]; Qld clinical [2], screen [1]); IMP+NDM (*n* = 4; NSW clinical [2]; Vic clinical [1], screen [1]); GES (*n* = 1; SA screen); GES+IMP (*n* = 1; Qld screen); KPC+OXA-48-like (*n* = 1; Vic clinical); KPC+NDM+OXA-48-like (*n* = 1; SA clinical); VIM (*n* = 1; NSW screen).

Table 4 Top five carbapenemase types from *Enterobacterales*, number reported by setting, by state and territory, 1 April 2025 – 30 June 2025

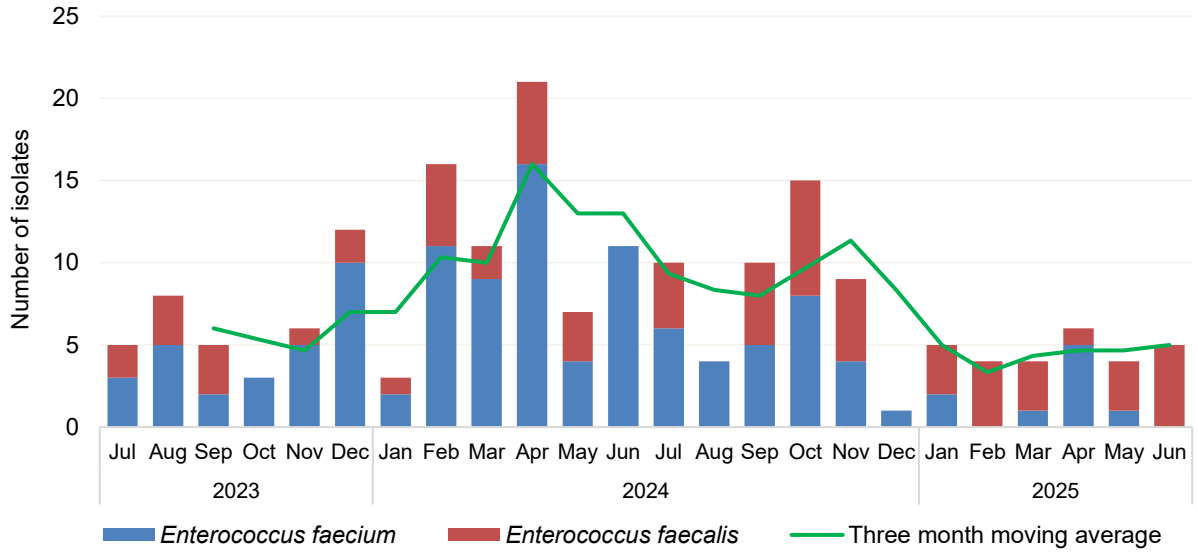
Carbapenemase type	Setting	State or territory								Total
		NSW	Vic	Qld	SA	WA	Tas	NT	ACT	
NDM	Total	58	58	22	22	13	1	4	2	180
	Public hospitals	45	27	16	20	5	0	3	1	117
	Private hospitals	1	1	1	0	3	0	0	0	6
	Aged care homes	0	0	0	0	0	0	0	0	0
	Community	2	28	2	2	5	0	1	0	40
	Unknown	10	2	3	0	0	1	0	1	17
IMP	Total	95	12	45	0	10	0	0	1	163
	Public hospitals	85	10	33	0	6	0	0	1	135
	Private hospitals	0	0	11	0	2	0	0	0	13
	Aged care homes	0	0	0	0	0	0	0	0	0
	Community	1	2	1	0	2	0	0	0	6
	Unknown	9	0	0	0	0	0	0	0	9
OXA-48-like	Total	20	22	2	8	5	1	0	0	58
	Public hospitals	18	16	2	6	3	1	0	0	46
	Private hospitals	0	1	0	1	1	0	0	0	3
	Aged care homes	0	0	0	0	0	0	0	0	0
	Community	0	5	0	1	1	0	0	0	7
	Unknown	2	0	0	0	0	0	0	0	2
NDM, OXA-48-like	Total	5	8	1	1	0	0	0	0	15
	Public hospitals	4	6	0	1	0	0	0	0	11
	Private hospitals	0	0	0	0	0	0	0	0	0
	Aged care homes	0	0	0	0	0	0	0	0	0
	Community	0	1	1	0	0	0	0	0	2
	Unknown	1	1	0	0	0	0	0	0	2
KPC	Total	0	6	3	0	0	0	0	0	9
	Public hospitals	0	3	1	0	0	0	0	0	4
	Private hospitals	0	0	0	0	0	0	0	0	0
	Aged care homes	0	0	0	0	0	0	0	0	0
	Community	0	3	1	0	0	0	0	0	4
	Unknown	0	0	1	0	0	0	0	0	1

Note: Top five carbapenemase types account for 96.8% (425/439) of all carbapenemase-producing *Enterobacterales* reported for this period. Other types were IMI (*n* = 5, Qld [3], NSW [1]), Vic [1]; IMP+NDM (*n* = 4, NSW [2], Vic [2]); GES (*n* = 1, SA); GES+IMP (*n* = 1, Qld); KPC+OXA-48-like (*n* = 1, Vic); KPC+NDM+OXA-48-like (*n* = 1, SA); VIM (*n* = 1, NSW).

Enterococcus species

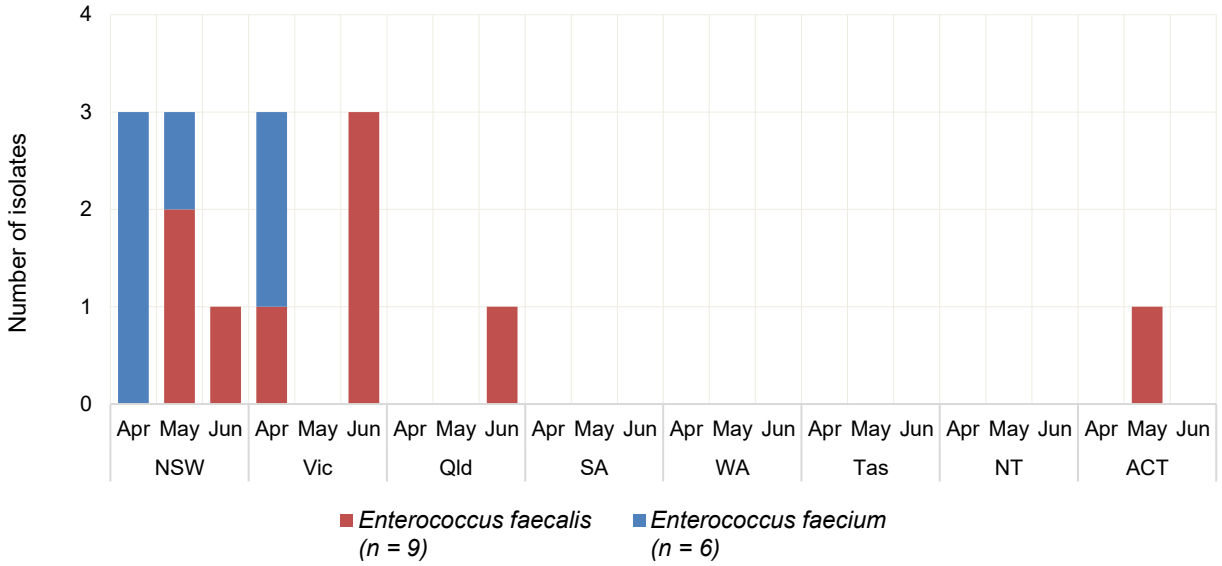
National data

Figure 12 Linezolid-nonsusceptible *Enterococcus* species, 24-month trend, national, 1 July 2023–30 June 2025



State and territory data

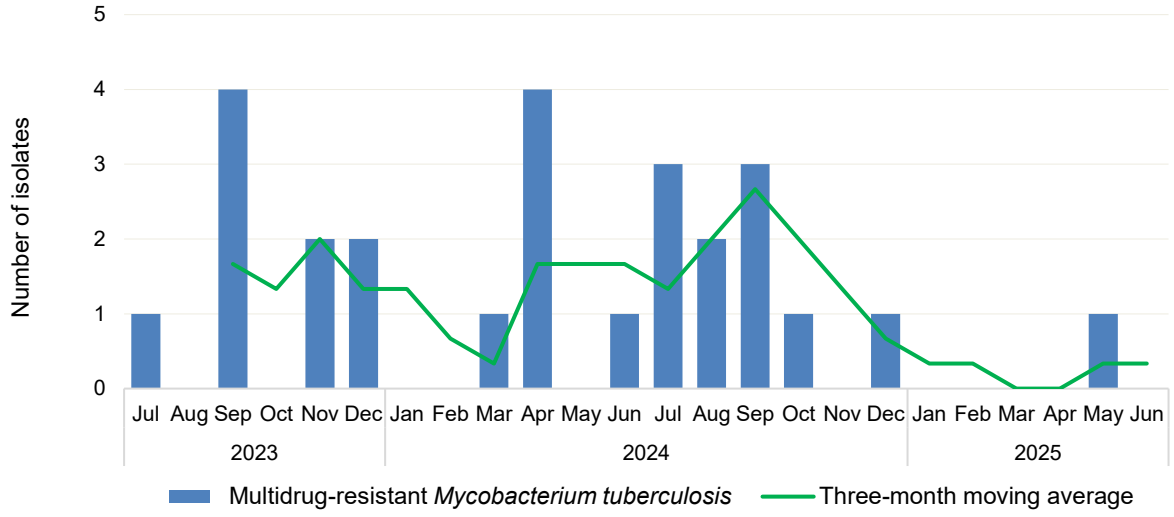
Figure 13 Linezolid-nonsusceptible *Enterococcus* species, number reported by state and territory, 1 April 2025 – 30 June 2025



Mycobacterium tuberculosis

National data

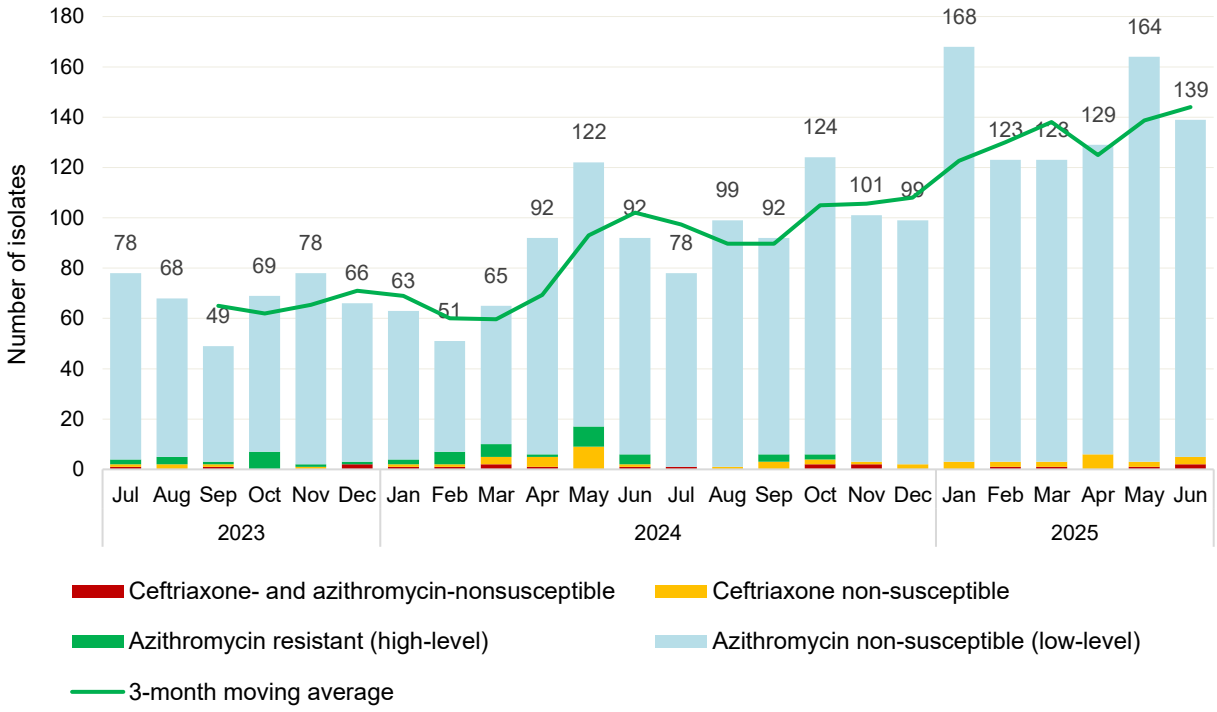
Figure 14 Multidrug-resistant *Mycobacterium tuberculosis,* 24-month trend, national, 1 July 2023–30 June 2025



Neisseria gonorrhoeae

National data

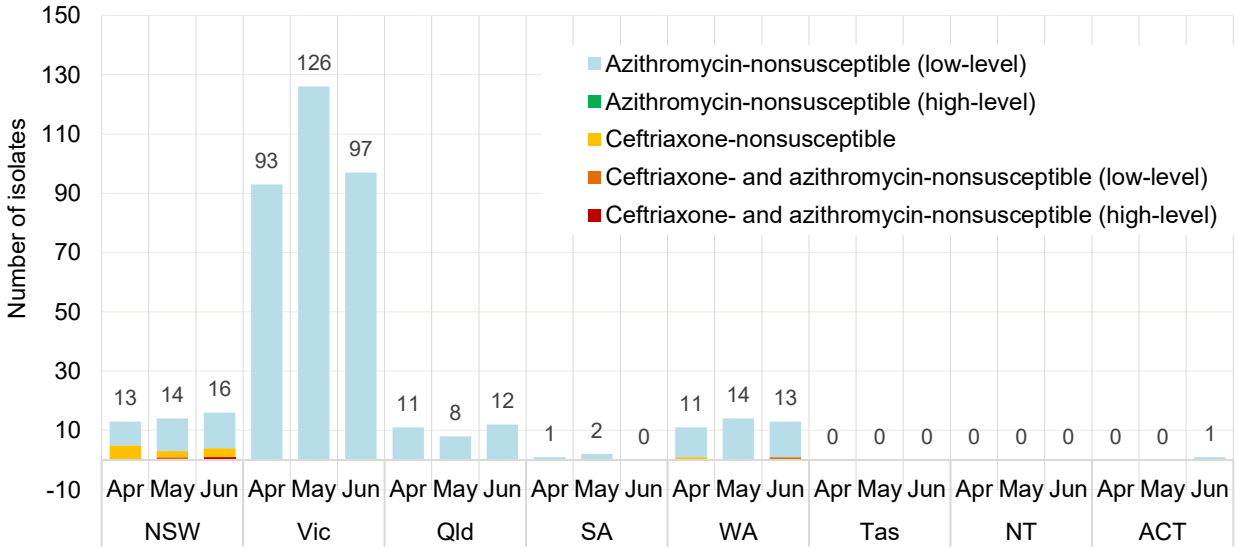
Figure 15 Ceftriaxone- and/or azithromycin-nonsusceptible *Neisseria gonorrhoeae*, 24-month trend, national, 1 April 2023–30 June 2025



Note: Low-level = azithromycin MIC < 256 mg/L; high-level = azithromycin MIC ≥ 256 mg/L.

State and territory data

Figure 16 Ceftriaxone- and/or azithromycin-nonsusceptible *Neisseria gonorrhoeae,* number reported by month, state and territory, 1 April 2025 – 30 June 2025

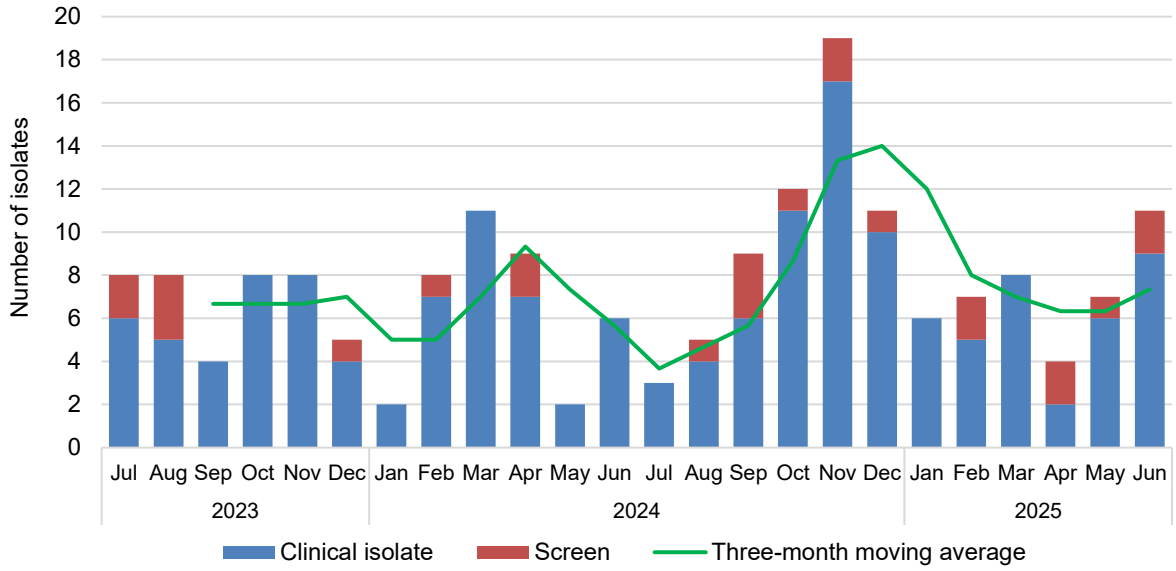


Note: Low-level = azithromycin MIC < 256 mg/L; high-level = azithromycin MIC ≥ 256 mg/L.

Pseudomonas aeruginosa

National data

Figure 17 Carbapenemase-producing *Pseudomonas aeruginosa*, 24-month trend by specimen type, national, 1 July 2023–30 June 2025



State and territory data

Figure 18 Carbapenemase-producing *Pseudomonas aeruginosa*, number reported by carbapenemase type and specimen type, by state and territory, 1 April 2025 – 30 June 2025

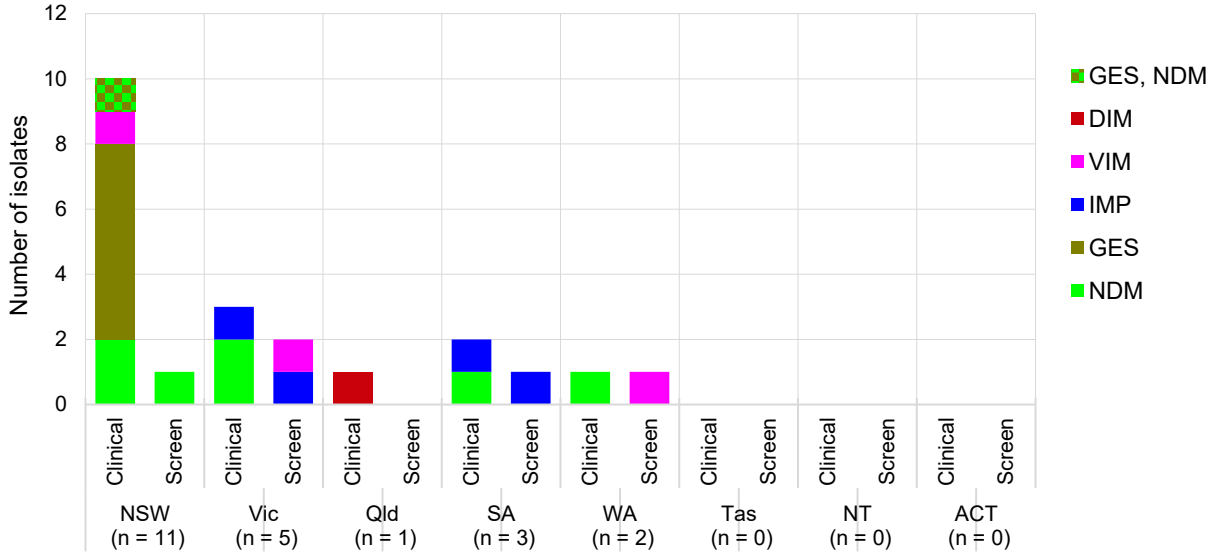


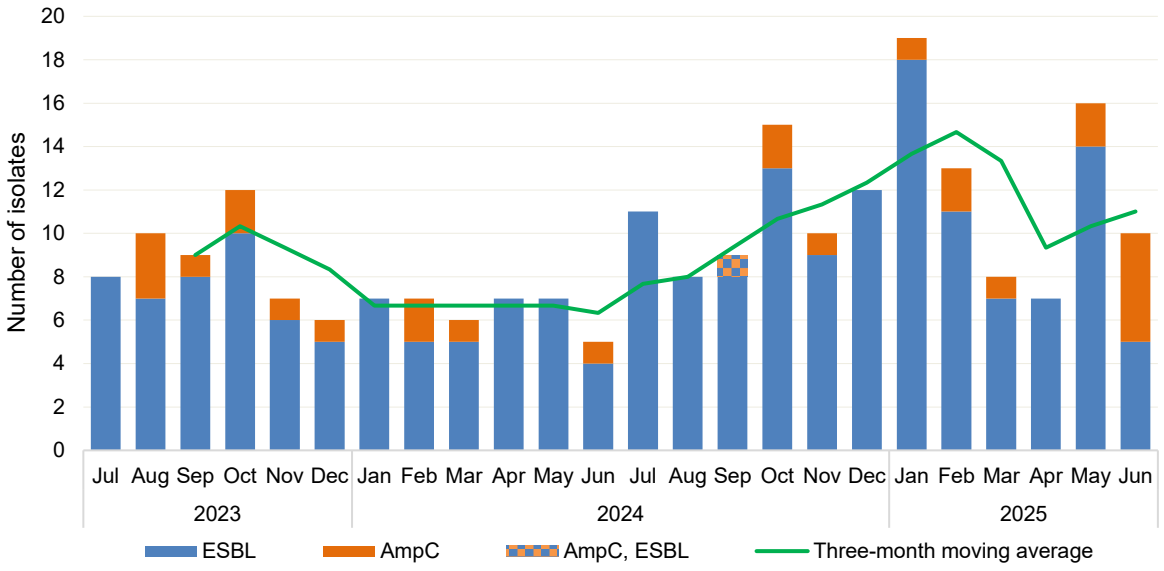
Table 5 Carbapenemase-producing *Pseudomonas aeruginosa*, number reported by setting, by state and territory, 1 April 2025 – 30 June 2025

Setting	State or territory								Total
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	
Total	11	5	1	3	2	0	0	0	22
Public hospital	4	4	1	3	1	0	0	0	13
Private hospital	1	0	0	0	1	0	0	0	2
Aged care home	0	0	0	0	0	0	0	0	0
Community	0	1	0	0	0	0	0	0	1
Unknown	6	0	0	0	0	0	0	0	6

Salmonella species

National data

Figure 19 Ceftriaxone-nonsusceptible Salmonella species, 24-month trend, national, 1 July 2023 – 30 June 2025



Shigella species

National data

Figure 20 Multidrug-resistant *Shigella* species, 24-month trend, national, 1 July 2023 – 30 June 2025

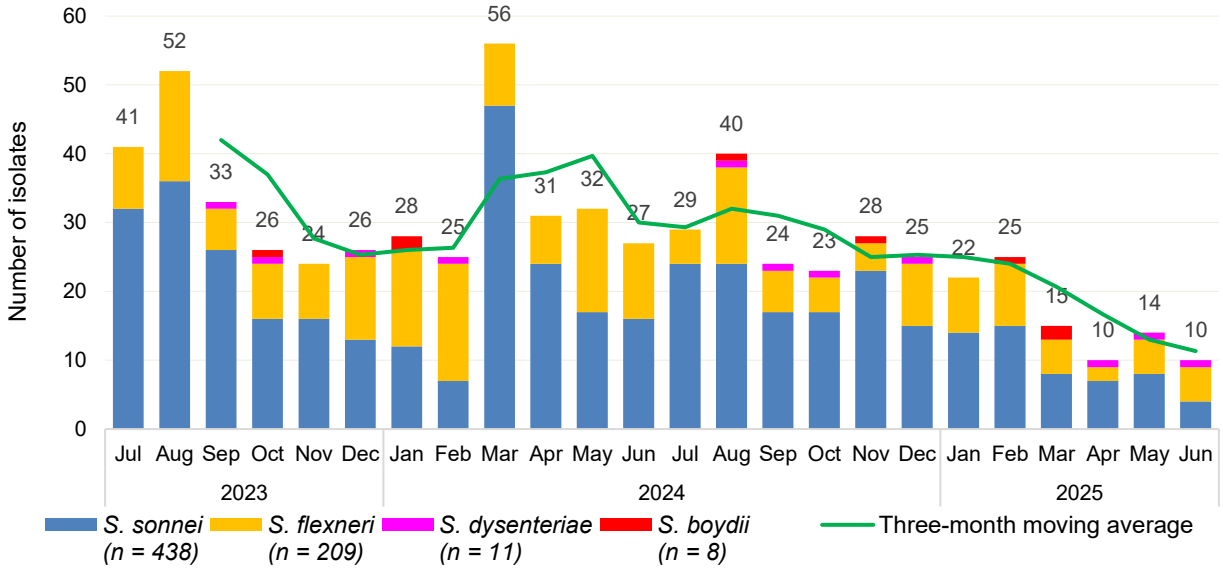
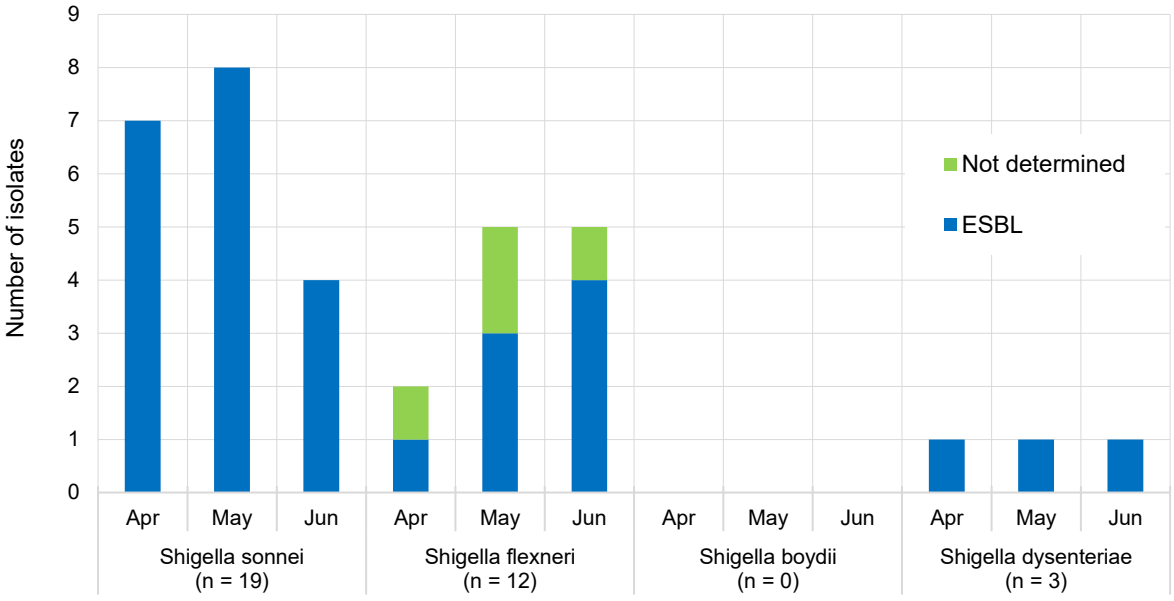


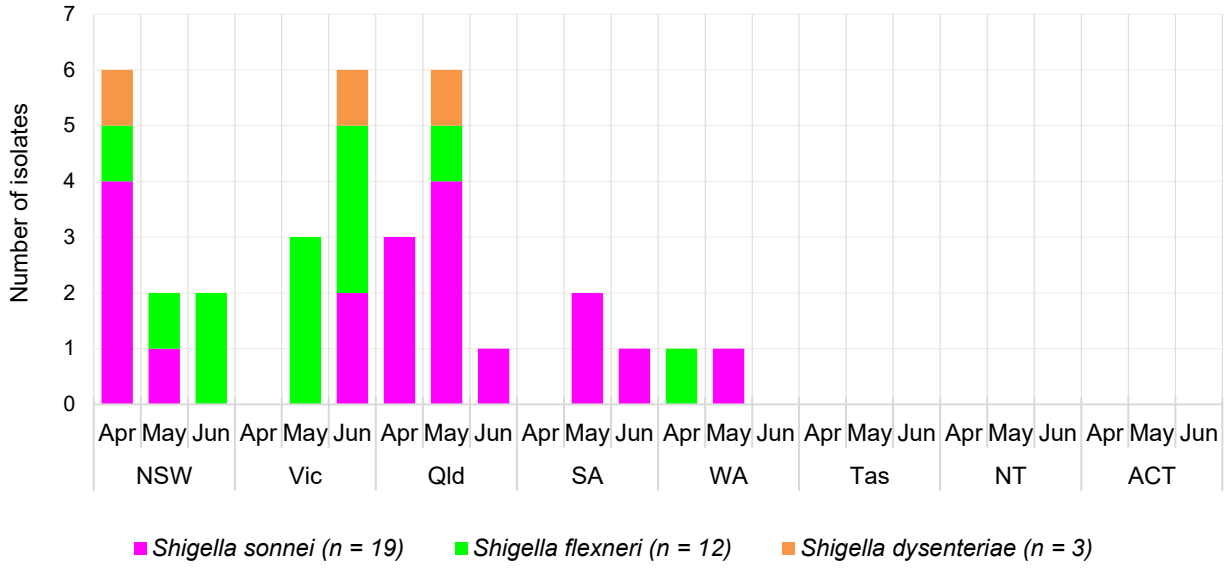
Figure 21 Multidrug-resistant *Shigella* species, number reported by month, national, 1 April 2025 – 30 June 2025



Note: Not determined = multidrug-resistant, ceftriaxone/cefotaxime susceptible.

State and territory data

Figure 22 Multidrug-resistant *Shigella* species, number reported by state and territory, 1 April 2025 – 30 June 2025



Staphylococcus aureus

National data

Figure 23 Linezolid- or vancomycin-nonsusceptible *Staphylococcus aureus,* 24-month trend, national, 1 July 2023–30 June 2025

State and territory data

There was one linezolid-nonsusceptible *S. aureus* reported from Queensland during this period. No vancomycin-nonsusceptible *S. aureus* were reported.

Appendix

Data Notes

The following are important considerations for interpreting National Alert System for Critical Antimicrobial Resistances (CARAlert) data:

- Participation in CARAlert is voluntary
- The data are based on the date that the isolate with the confirmed critical antimicrobial resistance (CAR) was collected
- States and territories refer to the state or territory within which the hospital is located, or within which the patient resides for isolates from the community. If place of residence is unknown or overseas, the state or territory of the originating laboratory is reported
- The same CAR/type/species is not submitted where the sample originated from the same patient who had the previous CAR, and the isolate was collected on the same day, or collected in the same admission or within three months
- Number of CARs reported does not always equal the number of patients, as patients may have more than one CAR, or species, detected in a specimen
- Cut-off date for data that are included in the CARAlert Data Explorer, data updates and reports is four weeks after the end of each reporting period
- Data may vary from that previously published as the reported number of CARs may have been updated to include additional submissions received or removed after the previous publication date; Comparison between data updates and reports may be influenced by delays in confirming laboratories reporting CARs to CARAlert due to late submission, which also means that the data analysed in this data update may not be complete for the time period at the time of publication
- National summary data are provided; comparison across states and territories is provided for organisms where large numbers are reported and a comparison is meaningful
- Local operating procedures for laboratories may not currently include testing for all the critical resistances included in CARAlert; however, all laboratories are encouraged to actively screen for CARs
- The CARAlert system generates a weekly summary email alert to report information on confirmed CARs to authorised officers from confirming laboratories, state and territory health authorities, the Australian Government Department of Health, Disability and Ageing (the Department) and the Australian Commission on Safety and Quality in Health Care (the Commission). Authorised officers in each state and territory have direct access to the CARAlert web portal for further information about their jurisdiction, including the name of the public hospital in which a patient with a confirmed CAR was cared for, and to extract reports on their data.

About AURA and CARAlert

The Antimicrobial Use and Resistance in Australia (AURA) surveillance program provides essential information to develop and implement strategies to prevent and contain antimicrobial resistance in human health and improve antimicrobial use across the acute and community healthcare settings. AURA is coordinated by the Department. AURA supports the National Safety and Quality Health Service (NSQHS) Preventing and Controlling Infections Standard and Australia's National Antimicrobial Resistance Strategy – 2020 and beyond.

CARAlert was established by the Commission in March 2016 as a component of the AURA surveillance program. Funding for CARAlert is provided by the Department, with contributions from the states and territories by meeting the costs of confirmatory testing and data submission processes.

CARAlert is based on routine processes used by pathology laboratories for identifying and confirming potential CARs. Participating confirming laboratories submit data to CARAlert on priority organisms with critical resistance to last-line antimicrobial agents, which can result in significant morbidity and mortality. Isolates collected from patients are reported to CARAlert as either a clinical isolate, that is a specimen (e.g., from blood, urine, wound) taken to guide clinical diagnosis, or as a screen for infection prevention and control purposes. No patient-level data are held in the CARAlert system.

CARAlert data on confirmed cases of CARs can be used to identify seasonal, geographic and national trends. The potential for CARAlert to act as an early warning system for CAR outbreaks to enable timely infection prevention and control responses is dependent on timely reporting of CARs by confirming laboratories.

The CARAlert Data Explorer, an interactive data dashboard, was published in June 2025. The Data Explorer offers customised analytics and trends for CARs and is complementary to CARAlert data updates and annual reports.

The CARs reported to CARAlert are listed in Table A1. These CARs were drawn from the list of high-priority organisms and antimicrobials which are the focus of the AURA surveillance program.[1]

[1] Australian Commission on Safety and Quality in Health Care. AURA 2023: fifth Australian report on antimicrobial use and resistance in human health. Sydney: ACSQHC; 2023.

Table A1 Critical antimicrobial resistances reported to CARAlert, 2025

Species	Critical Resistance
Acinetobacter baumannii complex*	Carbapenemase-producing†
Candida auris†	–
Enterobacterales	Carbapenemase-producing and/or ribosomal methyltransferase-producing
	Transmissible colistin resistance†
Enterococcus species	Linezolid-resistant
Mycobacterium tuberculosis	Multidrug-resistant – resistant to at least rifampicin and isoniazid
Neisseria gonorrhoeae	Ceftriaxone-nonsusceptible and/or azithromycin-nonsusceptible
	Gentamicin-resistant§
Neisseria meningitidis	Ciprofloxacin-nonsusceptible§
Pseudomonas aeruginosa	Carbapenemase-producing†
Salmonella species	Ceftriaxone-nonsusceptible
Shigella species	Multidrug-resistant
Staphylococcus aureus#	Vancomycin- or linezolid-nonsusceptible**
Streptococcus pyogenes	Penicillin reduced susceptibility

* For CARAlert, *A. baumannii* complex includes *A. baumannii*, *A. calcoaceticus*, *A. dijkshoorniae*, *A. nosocomialis*, *A. pittii* and *A. seifertii*

† Reported to CARAlert from July 2019

§ Reported to CARAlert from January 2023

\# For CARAlert, *S. aureus* includes *S. argenteus* and *S. schweitzeri*

** Reporting of daptomycin-nonsusceptible *S. aureus* was suspended from January 2023

Note: Low level-azithromycin-nonsusceptible *N. gonorrhoeae* was excluded from the weekly summary following review in 2018.

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