

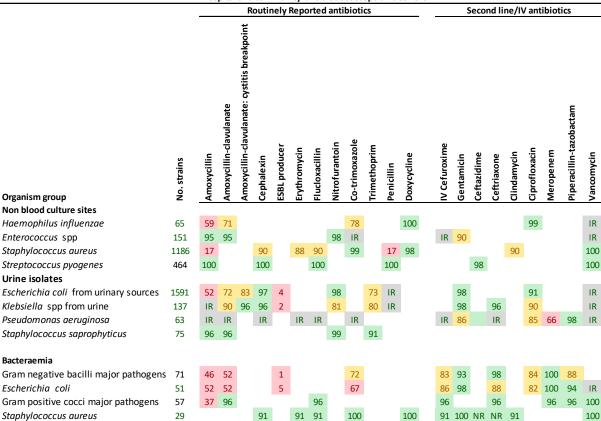
Antibiotic susceptibility tables for 2019: Hutt Valley and Capital and Coast DHBs community data, and combined hospital and community for Wairarapa.

The table shows the antibiotic susceptibility results for the main pathogens encountered in the community and includes Wairarapa hospital data as well. There are slight differences between the laboratories in the way bugs are worked up. For example amoxycillin is tested front line for all urine gram negatives in the Wairarapa, whereas it only tested second line at WSCL.

The data are provided for discussion, but we would not recommend any major changes to empiric antibiotic guidelines on the basis of these data alone.

The data show that there are no real differences in resistance rates between the different communities (or in the rest of NZ).

		Routinely Reported antibiotics														Second line antibiotics				
	No. strains	Amoxycillin	Amoxycillin-clavulanate	Amoxycillin-clavulanate: cystitis breakpoint	Cephalexin	ESBL	Erythromycin	Flucloxacillin	Nitrofurantoin	Co-trimoxazole	Trimethoprim	Penicillin	Doxycycline		Clindamycin	Ciprofloxacin	Fusidicacid	Mupirocin	Medilinam	
Urine			_	_																
Escherichia coli from urine all community	10785		71	86	94	4			99		72					89			92 8	
Escherichia coli from urine > 75 yrs community	7435		73	86	93	4			98		70					88			92	
Enterococcus spp from urine	548	99		IR	IR				99											
Pseudomonas aeruginosa from urine	176	IR	IR	IR	IR		IR	IR	IR							96				
Klebsiella spp from urine all community	914	IR	86	92	95				76		76					91			83	
Klebsiella spp from urine >80 yrs community	370	IR	85	91	91				78		71					89				
S. saprophyticus	631								100		93									
Others																				
Staphylococcus aureus community	8912	15	91		91		88	91		99		15	97		90		83	95		
Streptococcus pyogenes	5358	100	100		100		92	100		90		100			93	IR				
Group B strep	1062	100	100		100		77			99		100			78	IR				
Other beta haemolytic streptococci	1877		100		100			100		100		100	62			IR				
MRSA community	851	IR			IR		70	IR		98		IR	96		70		76	96		
Streptococcus pneumoniae	972	94	94	94						78		74	85							
Haemophilus influenzae	301	75	86							72			99							



There have been no major shifts in resistance, with stable numbers of MRSA (9%) and ESBL-producing *E. coli* (4%).

The main take home messages are:

- Nitrofurantoin remains the most effective antibiotic for cystitis by far, and we look forward to the macrocrystaline preparation becoming available, which can be given twice daily
- Cefalexin is running a close second, but can only be reliably used for cystitis, not pyelonephritis. It may also be used for skin/soft tissue infections, but not respiratory tract infections.
- Ciprofloxacin resistance keeps creeping up, and remains an antibiotic that should be only used for pyelonephritis or when there are no other active alternatives
- Pivmecillinam and fosfomycin are available after discussion with a microbiologist and are used for difficult to treat urinary tract infections
- Chest infections need higher doses of antibiotics: 750 1000 mg tds of amoxicillin or amoxicillin 500 mg and amoxicillin-clavulanate 625 mg tds are typical adult doses for haemophilus or pneumococcus
- The 74% susceptibility of pneumococcus to penicillin increases to 94% if high dose penicillin or amoxycillin is prescribed
- Please provide clinical details: it does affect how we work up and report microbiology results

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