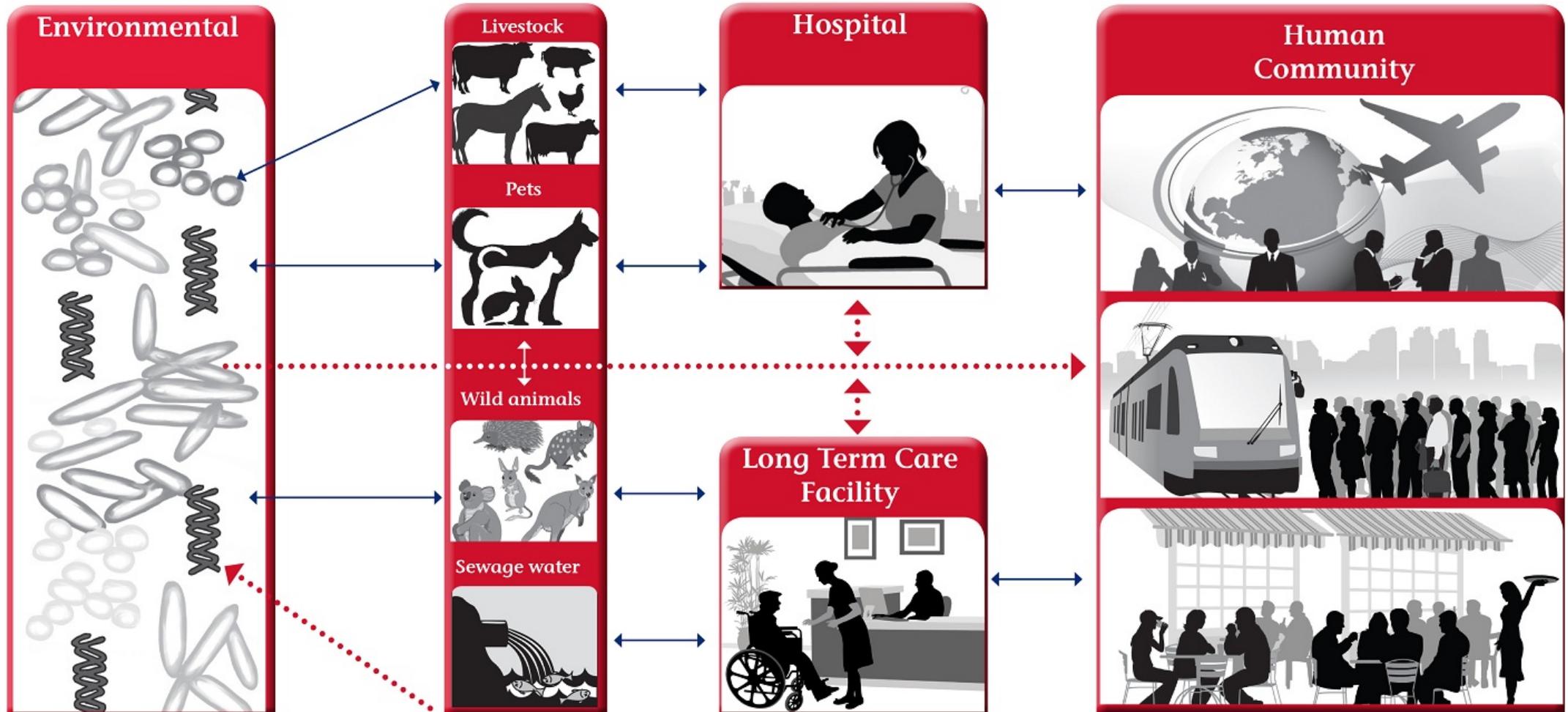


Community Antibioqram Jan - Dec 2018



Community Antibigram Jan - Dec 2018

Cumulative antibiograms from community isolates can be a useful resource to inform empirical therapy recommendations as per Therapeutic Guidelines.

This document provides a cumulative antibiogram of isolates collected from patients in the community. Sullivan Nicolaides pathology services patients from all over Queensland as well as Northern New South Wales. The data is divided into three parts

1. Urinary Antibigram

- Note: only a subset of *S.saprophyticus* isolates have had routine susceptibility performed.

2. Non Urinary Antibigram

3. Blood Culture Antibigram

- Organisms are listed in descending order of frequency.
- Organisms are colour coded according to whether they are Gram Positive or Gram Negative.
- Only the first isolate of a given species per patient per year per subtype (e.g urine, non urine) is included.
- Since 2012, susceptibility testing to produce these antibiograms is performed using EUCAST microbroth dilution and disc diffusion.¹
- Expert EUCAST rules in Antimicrobial Susceptibility testing have been applied.²
- Where the total number of isolates tested is < 30, results are considered statistically invalid in accordance with CLSI M39-A4.³
- Where only a subset (< 95%) of isolates from a particular organism group have been tested, reported susceptibilities are usually not indicative of the true susceptibility because of the selective nature of testing only more resistant isolates. These occasions are marked with an * and susceptibility results should be interpreted with caution.

Signal resistances:

Some important antibiotic resistances have their origin or circulate in the community. At the end of each antibiogram, signal resistances are summarised

These organisms include

- *Enterobacterales* resistant to third or fourth generation cephalosporins due to the presence of Extended Spectrum Beta Lactamases (ESBLs)
- *Enterobacterales* resistant to third or fourth generation cephalosporins due to the presence of Plasmid Mediated AMPC production (PAMPs)
- *Enterobacterales* resistant to carbapenems due to the presence of a plasmid mediated carbapenamase (CPE)
- Non *Enterobacterales* (e.g *Acinetobacter* spp; *Pseudomonas aeruginosa*) resistant to carbapenems due to the presence of a plasmid mediated carbapenamase (CPNE)
- Vancomycin resistant Enterococci (VRE)
- Methicillin resistant *Staphylococcus aureus* (MRSA)
- Vancomycin heteroresistant, intermediate and resistant *Staphylococcus aureus* (hVISA, VISA, VRSA)
- Penicillin intermediate and resistant *Streptococcus pneumoniae* noting that breakpoints differ according to clinical condition (meningitis, pneumonia, other) and mode of administration
- Penicillin intermediate and resistant viridans *Streptococci*

Community Antibigram Jan - Dec 2018

Colour coding for all antibiograms tables is shown below.

	Gram Positive Organism		≥90% of isolates susceptible		≥90% of isolates susceptible (where sample size <95% of total isolates tested)
	Gram Negative Organism		70-89% of isolates susceptible		70-89% of isolates susceptible (where sample size <95% of total isolates tested)
	Antibiotic Not recommended to be used in children without specialist advice		<70% of isolates susceptible		<70% of isolates susceptible (where sample size <95% of total isolates tested)
	Restricted or 2nd Line Antibiotics	R	Intrinsic Resistance is present with this organism-antibiotic combination	*	Sample size <95% of the total isolates tested
	Restricted or 2nd Line Antibiotics and Antibiotic Not recommended to be used in children without specialist advice	%	Percentage of isolates sensitive to this particular antibiotic	n	Number of isolates tested with this antibiotic

References:

1. <https://www.safetyandquality.gov.au/our-work/safety-in-e-health/>
2. http://www.eucast.org/clinical_breakpoints/
3. http://www.eucast.org/expert_rules_and_intrinsic_resistance/
4. Clinical and Laboratory Standards Institute (CLSI). Guideline for Analysis and Presentation of Cumulative Antimicrobial Susceptibility (M39-A4). 3rd ed. Pennsylvania: CLSI, 2014
5. www.snp.com.au

Community Antibrogram Jan - Dec 2018

Urine Antibiogram			All SNP Community																				
Organism Group	No. Organisms	%Total		Amoxicillin	Amoxicillin-clavulanate	Piperacillin-tazobactam	Cefalexin	Ceftriaxone	Ceftazidime	Meropenem	Gentamicin	Amikacin	Trimethoprim	Nitrofurantoin	Norfloxacin	Ciprofloxacin	Fusidic Acid	Rifampicin	Gentamicin (High Level)	Fosfomycin	Quinupristin-dalfopristin	Vancomycin	
				%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n
All isolates	96557	100																					
Escherichia spp	63055	65.3	%	59	89	95	93	91		100	94	100	77	99	91						100		
			n	63046	63041	* 31668	62973	* 31774		* 30563	* 31805	* 30603	63048	63003	63047						* 2873		
Enterococcus spp	9692	10.0	%	98			0	R	R				R	99	96		R	15	78		38	83	
			n	9689			* 10							9672	9681			* 181	* 192		* 193	* 212	
Klebsiella spp	7708	8.0	%	R	97	92	96	96		100	98	100	90	85	96								
			n		7707	* 3410	7694	* 3422		* 3036	* 3428	* 3045	7708	7702	7706								
Staphylococcus saprophyticus	2634	2.7	%	25	95		R		R				93	100	100		R				R		
			n	* 597	* 608								2610	2620	2622								
Proteus mirabilis	2416	2.5	%	89	97	100	98	99		100	97	100	86	R	99								
			n	2416	2416	* 1212	2416	* 1216		* 1132	* 1220	* 1134	2416		2416								
Pseudomonas aeruginosa	1985	2.1	%	R	R	95	R	R	97	96	98	97	R	R	95	93							
			n			1979			1983	* 1625	* 1984	* 1632			1914	1984							
Enterobacter cloacae complex	1599	1.7	%	R	R	80	R	80		99	98	100	85	86	96								
			n			* 1264	* 1329	* 1329		* 1203	* 1329	* 1203	1599	1595	1599								
Citrobacter koseri, amalonaticus group	1343	1.4	%	R	98	95	96	97		100	100	100	99	98	100								
			n		1343	* 661	1341	* 665		* 612	* 666	* 617	1343	1343	1343								
β haemolytic Streptococci Group B	1132	1.2	%	100									91	100	77								
			n	1132									1130	1132	* 725								

Community Antibiogram Jan - Dec 2018

Urine Antibiogram			All SNP Community																			
Organism Group	No. Organisms	%Total																				
			Amoxicillin	Amoxicillin-clavulanate	Piperacillin-tazobactam	Cefalexin	Ceftriaxone	Ceftazidime	Meropenem	Gentamicin	Amikacin	Trimethoprim	Nitrofurantoin	Norfloxacin	Ciprofloxacin	Fusidic Acid	Rifampicin	Gentamicin (High Level)	Fosfomycin	Quinupristin-dalfopristin	Vancomycin	
All isolates	96557	100																				
Klebsiella aerogenes	990	1.0	%	R	R	78	R	80		99	100	100	96	66	96							
			n			*		*		*	*	*	990	990	990							
Coagulase negative Staphylococci	800	0.8	%	19	72				R				58	100	88		71	96				100
			n	790	800								796	797	797		*	*				
Morganella spp	650	0.7	%	R	R	96	R	94		99	97	100	88	R	94							
			n			643		644		*	644	*	650		650							
Staphylococcus aureus (ALL)	621	0.6	%	22	88				R				94	100	94		90	100				100
			n	620	621								608	619	609		*	*				
Citrobacter freundii complex	468	0.5	%	R	R	77	R	73		97	96	100	88	98	95							
			n			*		*		*	*	321	369	322	468	468	468					
Serratia spp	415	0.4	%	R	R	97	R	96		99	99	98	93	R	94							
			n			403		403		*	403	*	415		415							
viridans Streptococci	207	0.2	%	98									69	100	61		R					
			n	205									207	206	207							
Proteus spp other	136	0.1	%	R	55	100	R	86		100	99	100	77	R	100							
			n		136	*		*		*	*	110	122	110	136		136					
Acinetobacter spp	93	0.1	%	R	R	80	R	R		98	100	99	R	4	75							
			n			89				*	85	90	*		93	*	69					

Community Antibigram Jan - Dec 2018

Urine Antibigram			All SNP Community																			
Organism Group	No. Organisms	%Total																				
			Amoxicillin	Amoxicillin-clavulanate	Piperacillin-tazobactam	Cefalexin	Ceftriaxone	Ceftazidime	Meropenem	Gentamicin	Amikacin	Trimethoprim	Nitrofurantoin	Norfloxacin	Ciprofloxacin	Fusidic Acid	Rifampicin	Gentamicin (High Level)	Fosfomycin	Quinupristin-dalfopristin	Vancomycin	
All isolates	96557	100																				
β haemolytic Streptococci Group A	82	0.1	%	100								100	100	89								
			n	82									*	70	*	70	*	65				
Providencia spp	79	0.1	%	R	R	100	R	99		100	84	100	78	R	100					R		
			n			79		79		*	68		79	*	68		79					
Aerococcus spp	67	0.1	%	100								17	100	90								
			n	67									*	63	*	67	*	67				
Salmonella spp	57	0.1	%	95	98			100		100			98	98	98							
			n	57	57			*	19	*	15			57	57	57						
Raoultella spp	49	0.1	%	R	98	100	96	100		100	100	100	90	98	100							
			n		49	*	26	49	*	26	*	15	*	26	*	15	49	49	49			
Pseudomonas spp	46	0.0	%	R	2	80	0	20		41	98	100	2	2	78							
			n		46	46	46	*	20	*	34	46	*	33	45	46	*	27				
Miscellaneous Enterobacteriales†	36	0.0	%	14	83	89	69	97		100	100	100	97	89	100							
			n	36	36	*	28	36	*	30	*	25	30	*	25	36	36	36				
Neisseria gonorrhoeae	31	0.0	%					100														
			n					31														

Community Antibigram Jan - Dec 2018

Signal Resistances: Where the tables below contain no data no multiresistant organisms have been detected.

Urine: Extended spectrum beta lactamase producing Enterobacterales (ESBL)

Organism Group	Organism Name	No. Positive	% of Strain
Citrobacter freundii complex n = 468	Citrobacter freundii	7	1.5
Citrobacter koseri, amalonaticus group n = 1343	Citrobacter farmeri	1	0.1
	Citrobacter koseri	1	0.1
Enterobacter cloacae complex n = 1599	Enterobacter cloacae	33	2.1
	Enterobacter hormaechei	1	0.1
Escherichia spp n = 63055	Escherichia coli	2480	3.9
Klebsiella aerogenes n = 990	Enterobacter aerogenes	5	0.5
Klebsiella spp n = 7708	Klebsiella oxytoca	4	0.1
	Klebsiella pneumoniae	110	1.4
Morganella spp n = 650	Morganella morganii	2	0.3
Proteus mirabilis n = 2416	Proteus mirabilis	6	0.2
Serratia spp n = 415	Serratia marcescens	3	0.7

Urine: Plasmid mediated AMPC producing Enterobacterales (PAMP)

Organism Group	Organism Name	No. Positive	% of Strain
Citrobacter koseri, amalonaticus group n = 1343	Citrobacter koseri	1	0.1
Escherichia spp n = 63055	Escherichia coli	1285	2.0
Klebsiella spp n = 7708	Klebsiella oxytoca	2	0.0
	Klebsiella pneumoniae	42	0.5
Proteus mirabilis n = 2416	Proteus mirabilis	6	0.2

Urine: Plasmid mediated Carbapenemase producing Enterobacterales (CPE)

Community Antibigram Jan - Dec 2018

Organism Group	Organism Name	No. Positive	% of Strain
Citrobacter freundii complex n = 468	Citrobacter braakii	2	0.4
	Citrobacter freundii	2	0.4
Citrobacter koseri, amalonaticus group n = 1343	Citrobacter koseri	1	0.1
Enterobacter cloacae complex n = 1599	Enterobacter cloacae	3	0.2
Escherichia spp n = 63055	Escherichia coli	5	0.0
Klebsiella spp n = 7708	Klebsiella oxytoca	2	0.0

Urine: Plasmid mediated Carbapenemase producing Non Enterobacterales (CPNE)

Organism Group	Organism Name	No. Positive	% of Strain
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Urine: Vancomycin Resistant Enterococci (VRE)

Organism Group	Organism Name	No. Positive	% of Strain
Enterococcus spp n = 9692	Enterococcus faecalis(VRE) - VAN-B	1	0.0
	Enterococcus faecium (VRE) - VAN-A	7	0.1
	Enterococcus faecium (VRE) - VAN-B	15	0.2

Urine: Methicillin Resistant Staphylococcus aureus (MRSA)

Organism Group	Organism Name	No. Positive	% of Strain
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Community Antibrogram Jan - Dec 2018

Non-urine Antibrogram

All SNP Community

Organism Group	No. Organisms	% Total	Antibiotics																										
			Penicillin	Amoxicillin	Flucloxacillin	Amoxicillin-clavulanate	Piperacillin-tazobactam	Cefalotin	Cefazolin	Ceftriaxone	Ceftazidime	Cefepime	Meropenem	Gentamicin	Amikacin	Sulpha-trimethoprim	Norfloxacin	Ciprofloxacin	Fusidic acid	Rifampicin	Gentamicin (High Level)	Erythromycin/Clarithromycin	Azithromycin	Clindamycin	Tetracyclines	Mupirocin	Quinupristin-dalfopristin	Vancomycin	
All isolates	73023	100																											
Staphylococcus aureus (ALL)	41013	56.2	% 19		89	89		89								98		97	92	100		82		83	96	89		100	
			n 41011		41007	41010		41012							41013	*	37691	37711	*	37698		41009		40993	41009	*	37647	*	37700
Pseudomonas aeruginosa	8009	11.0	%	R		R	97		R	R	98	98	98	97	97	R	95							R					
			n				7998				7999	7660	8007	8009	* 6191		7998												
β haemolytic Streptococci Group A	7095	9.7	% 100					100								99			99		92		93	87			100		
			n 7094					7055	*	4664					7095			1777			7088		7090	7092			* 4719		
Haemophilus influenzae	4644	6.4	% 68		86			77							72		89	R			R		99						
			n 4642		4640			*	13						4642	*	18						4642						
β haemolytic Streptococci Other (nonA nonB)	1968	2.7	% 100					100		98						99			100		81		81	71			100		
			n 1968					1939	*	1100					1968			*	390		1966		1966	1967			* 1121		
Campylobacter spp	1633	2.2	%														77	R			96	96	82		R				
			n												1633						1633	1633	1633						
Streptococcus pneumoniae	1394	1.9	% 65					83								77			100		74		79	77			100		
			n 1392					*	922						1394			*	407		1392	*	1288	1392	*	919	*		
Moraxella catarrhalis	1344	1.8	% 1		100											94					100		100						
			n 1340		1344										1344						1343		1344						
Aeromonas spp	1160	1.6	%	R	43	91		R	99	100	75	100	100	100	98	97	99												
			n		*	555	*	1025	*	1083	*	1045	1037	1109	*	975	1159	*	1044	1086									

Community Antibioqram Jan - Dec 2018

Non-urine Antibioqram

All SNP Community

Organism Group	No. Organisms	%Total	Antibiotics																									
			Penicillin	Amoxicillin	Flucloxacillin	Amoxicillin-clavulanate	Piperacillin-tazobactam	Cefalotin	Cefazolin	Ceftriaxone	Ceftazidime	Cefepime	Meropenem	Gentamicin	Amikacin	Sulpha-trimethoprim	Norflloxacin	Ciproflloxacin	Fusidic acid	Rifampicin	Gentamicin (High Level)	Erythromycin/Clarithromycin	Azithromycin	Clindamycin	Tetracyclines	Mupirocin	Quinupristin-dalfopristin	Vancomycin
All isolates	73023	100																										
Salmonella spp	832	1.1	%	89		98			99			100			98	92	95											
			n	832		* 765			* 778			* 775			832	829	* 779											
Coagulase negative Staphylococci	504	0.7	%	38		83	83			R					92		96	92	99			78		87	81		100	
			n	502		502	502								503		* 478	479	* 478			504		504	504		* 478	
viridans Streptococci	500	0.7	%	96					98			89			94			R		100	78		87	64			100	
			n	499					* 259			* 239			256				* 10		497		499	500		* 247		
Escherichia spp	411	0.6	%		48		78	94			75	87																
			n		408		409	409			410	410			409	409	410	392										
Neisseria gonorrhoeae	236	0.3	%	8							100																	
			n	236							234																	
Fastidious GNB†	222	0.3	%	97	99		100	100		100	100			97	100	88									99			
			n	* 132	221		218	* 33		* 55	* 53			* 38	* 49	* 41									* 193			
Klebsiella spp	204	0.3	%		R		94	91			83	95			96	100	98	99										
			n				204	201			204	203			201	202	204	* 179										
Non fermenting GNB†	183	0.3	%		3		63	91			1	37			35	84	27	28							97			
			n		178		* 142	* 140			* 140	* 158			* 134	* 140	* 142	* 83							* 60			
Stenotrophomonas maltophilia	175	0.2	%		R		R	R	R	R	R	R			R	R	R	R							R			
			n																									

Community Antibiogram Jan - Dec 2018

Non-urine Antibiogram

All SNP Community

Organism Group	No. Organisms	% Total	Antibiotics																									
			Penicillin	Amoxicillin	Flucloxacillin	Amoxicillin-clavulanate	Piperacillin-tazobactam	Cefalotin	Cefazolin	Ceftriaxone	Ceftazidime	Cefepime	Meropenem	Gentamicin	Amikacin	Sulpha-trimethoprim	Norfloxacin	Ciprofloxacin	Fusidic acid	Rifampicin	Gentamicin (High Level)	Erythromycin/Clarithromycin	Azithromycin	Clindamycin	Tetracyclines	Mupirocin	Quinupristin-dalfopristin	Vancomycin
All isolates	73023	100																										
Serratia spp	163	0.2	%	R		R	98		R	96		98	99	98	96	99		96										
			n				163			163		162	163	163	162	163		163										
Yersinia spp	127	0.2	%	R		R	95	R	R	97		100	99	99	98	100	98	99										
			n				*			*		*	*	*	*	127	127	*										
Enterobacter cloacae complex	125	0.2	%	R		R	86		R	86		94	100	97	100	91		95										
			n				*			125		124	124	125	*	125		123										
β haemolytic Streptococci Group B	125	0.2	%	100				100		100						99			44		74		79	27			100	
			n	125				*		111		93				124			*	32		124	124	124		*	97	
Corynebacterium spp	118	0.2	%	86				94								61					43		38	100			100	
			n	118				*		33						71					74		117	118		*	74	
Vibrio spp	85	0.1	%	18		88	100		48	99		100	100	100		98		100							100			
			n	84		*	*		25	*		*	*	*		85		84							85			
Proteus mirabilis	81	0.1	%	94		96	100		88	100		100	100	96	100	90		94										
			n	81		81	81		81	81		81	81	81	80	81		81										
Enterococcus spp	81	0.1	%	98				R	R	R	R					R			R	20	62	R		R	23	11	96	
			n	80															*	15	*	13			81	*	78	
Acinetobacter spp	58	0.1	%		R		R	84		R	R	83	95	100	98	98	97		98									
			n				57					*	*	57	58	*	58		58									

Community Antibioqram Jan - Dec 2018

Non-urine Antibioqram

All SNP Community

Organism Group	No. Organisms	% Total	Antibiotics																									
			Penicillin	Amoxicillin	Flucloxacillin	Amoxicillin-clavulanate	Piperacillin-tazobactam	Cefalotin	Cefazolin	Ceftriaxone	Ceftazidime	Cefepime	Meropenem	Gentamicin	Amikacin	Sulpha-trimethoprim	Norfloxacin	Ciprofloxacin	Fusidic acid	Rifampicin	Gentamicin (High Level)	Erythromycin/Clarithromycin	Azithromycin	Clindamycin	Tetracyclines	Mupirocin	Quinupristin-dalfopristin	Vancomycin
All isolates	73023	100																										
Pseudomonas spp	57	0.1	%	R		2	73		R	29	100	61	100	100	16		100											
			n			56	56			*	*	*	57	*	56		57											
Nocardia spp	57	0.1	%			23				51				98	98		12											
			n			57				57				57	56		57											
Corynebacterium diphtheriae	55	0.1	%	33					100						96						93		98	98			100	
			n	55					*					*	27					*	43		*	51	*	52	*	37
Shigella spp	44	0.1	%		62	83	100		69	97	100	100	76	69	23	55	60											
			n		42	*	*		*	*	*	*	*	*	44	44	*											
Morganella spp	40	0.1	%	R		R	98		R	100	97	100	98	100	90		98											
			n				40			39	39	40	40	*	40		40											
Klebsiella aerogenes	37	0.1	%	R		R	100		R	100	100	100	100	100	100		100											
			n				37			37	37	37	37	*	37		37											
Citrobacter koseri, amalonaticus group	35	0.0	%	R		97	91		97	100	100	100	100	100	100		100											
			n			35	34		35	34	34	34	35	34	35		34											

Community Antibigram Jan - Dec 2018

Signal Resistances: Where the tables below contain no data no multiresistant organisms have been detected.

NonUrine: Extended spectrum beta lactamase producing Enterobacterales (ESBL)

Organism Group	Organism Name	No. Positive	% of Strain
Enterobacter cloacae complex n = 125	Enterobacter cloacae	5	4.0
Escherichia spp n = 411	Escherichia coli	41	10.0
Klebsiella spp n = 204	Klebsiella oxytoca	1	0.5
	Klebsiella pneumoniae	7	3.4
Salmonella spp n = 832	Salmonella species	5	0.6
Serratia spp n = 163	Serratia marcescens	1	0.6
Shigella spp n = 44	Shigella sonnei	1	2.3

NonUrine: Plasmid mediated AMPC producing Enterobacterales (PAMP)

Organism Group	Organism Name	No. Positive	% of Strain
Escherichia spp n = 411	Escherichia coli	14	3.4
Klebsiella spp n = 204	Klebsiella pneumoniae	1	0.5
Proteus mirabilis n = 81	Proteus mirabilis	1	1.2
Salmonella spp n = 832	Salmonella species	1	0.1

NonUrine: Plasmid mediated Carbapenemase producing Enterobacterales (CPE)

Organism Group	Organism Name	No. Positive	% of Strain
Serratia spp n = 163	Serratia marcescens	1	0.6

NonUrine: Plasmid mediated Carbapenemase producing Non Enterobacterales (CPNE)

Organism Group	Organism Name	No. Positive	% of Strain
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Community Antibigram Jan - Dec 2018

NonUrine: Vancomycin Resistant Enterococci (VRE)			
Organism Group	Organism Name	No. Positive	% of Strain
Enterococcus spp n = 81	Enterococcus faecium (VRE) - VAN-A	1	1.2

NonUrine: Methicillin Resistant Staphylococcus aureus (MRSA)			
Organism Group	Organism Name	No. Positive	% of Strain
Staphylococcus aureus (ALL) n = 41010	S.aureus (non-multiresistant MRSA)	3954	9.6
	Staphylococcus aureus (MRSA)	124	0.3
	Staphylococcus aureus (UK EMRSA-15)	283	0.7

NonUrine: Streptococcus pneumoniae Penicillin Susceptibility (Non-meningitis breakpoints)			
Organism Group	MIC category	No.	% of Strain
Streptococcus pneumoniae n = 1392	Sensitive \leq 0.06 mg/L	905	65.0
	Intermediate 0.12 - 2 mg/L	468	33.6
	Resistant $>$ 2 mg/L	19	1.4

NonUrine: Streptococcus pneumoniae Ceftriaxone Susceptibility			
Organism Group	MIC category	No.	% of Strain
Streptococcus pneumoniae n = 1392	Sensitive \leq 0.5 mg/L	8	0.6
	Intermediate 1 - 2 mg/L	13	0.9
	Resistant $>$ 2 mg/L	5	0.4

Community Antibigram Jan - Dec 2018

Blood Culture: Plasmid mediated AMPC producing Enterobacterales (PAMP)

Organism Group	Organism Name	No. Positive	% of Strain
Escherichia spp n = 38	Escherichia coli	1	2.6

Blood Culture: Plasmid mediated Carbapenemase producing Enterobacterales (CPE)

Organism Group	Organism Name	No. Positive	% of Strain
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Blood Culture: Plasmid mediated Carbapenemase producing Non Enterobacterales (CPNE)

Organism Group	Organism Name	No. Positive	% of Strain
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Blood Culture: Vancomycin Resistant Enterococci (VRE)

Organism Group	Organism Name	No. Positive	% of Strain
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Blood Culture: Methicillin Resistant Staphylococcus aureus (MRSA)

Organism Group	Organism Name	No. Positive	% of Strain
Staphylococcus aureus (ALL) n = 19	S.aureus (non-multiresistant MRSA)	1	5.3

Community Antibigram Jan - Dec 2018

Blood Culture: Streptococcus pneumoniae Penicillin Susceptibility (Non-meningitis breakpoints)

Blood Culture: Streptococcus pneumoniae Ceftriaxone Susceptibility

Organism Group	MIC category	No.	% of Strain
Streptococcus pneumoniae n = 1	Sensitive \leq 0.5 mg/L	1	100.0

Blood Culture: Streptococcus alpha haem (viridans Streptococci) Penicillin Susceptibility

Organism Group	MIC category	No.	% of Strain
viridans Streptococci n = 10	Sensitive \leq 0.06 mg/L	10	100.0

† Miscellaneous organism groupings detail [report](#).