

## John Hunter Hospital Urinary Isolate Cumulative Antibioqram, 2017

Organism type	Isolates	% total	Unrestricted antibiotics						Restricted antibiotics			
			Ampicillin	Amoxicillin+clavulanate	Cefazolin / cephalixin	Nitrofurantoin	Trimethoprim	Gentamicin (aminoglycoside)	Ceftriaxone	Norfloxacin	Vancomycin	
All isolates	2,932	Some miscellaneous/contaminant species excluded.										
Gram negative isolates	<i>Escherichia coli</i>	1,433	49%	55%	80%	81%	99%	77%	95%	95%	89%	R
	<i>Klebsiella</i> species	256	9%	R	93%	78%	n/a	89%	98%	96%	95%	R
	<i>Enterobacter</i> -like species*	263	9%	R	R	R	n/a	84%	94%	**	89%	R
	<i>Proteus mirabilis</i>	130	4%	92%	98%	92%	R	79%	100%	99%	99%	R
	<i>Pseudomonas aeruginosa</i>	202	7%	R	R	R	R	R	95%	R	97%	R
Gram positives	<i>Staphylococcus saprophyticus</i>	35	1%	n/a	93%	93%	100%	94%	n/a	S	n/a	S
	<i>Streptococcus agalactiae</i> (group B strep)	268	9%	S	S	S	S	n/a	R	S	n/a	S
	<i>Enterococcus faecalis</i>	266	9%	S	S	R	100%	R	R	R	R	100%
	<i>Enterococcus faecium</i>	79	3%	R	R	R	n/a	R	R	R	R	43%

n/a	Not available - not routinely tested in this laboratory or no testing standard available
93%	> 90% of isolates susceptible
S	Susceptible by extrapolation or intrinsically susceptible
75%	70-89% of isolates susceptible
45%	< 70% of isolates susceptible
R	Intrinsically resistant
*	<i>Enterobacter, Serratia, Citrobacter, Providencia, Morganella</i> species (excludes <i>C. diversus</i> )
**	Resistance may emerge during therapy and agent NOT recommended for these species.
	Refer to <a href="http://www.aimed.net.au">www.aimed.net.au</a> for HNELHD restricted antiinfective indications.

## Calvary Mater Urinary Isolate Cumulative Antibigram, 2017

Organism type	Isolates	% total	Unrestricted antibiotics						Restricted antibiotics			
			Ampicillin	Amoxicillin+clavulanate	Cefazolin / cephalixin	Nitrofurantoin	Trimethoprim	Gentamicin (aminoglycoside)	Ceftriaxone	Norfloxacin	Vancomycin	
All isolates	1,178	Some miscellaneous/contaminant species excluded.										
Gram negative isolates	<i>Escherichia coli</i>	673	57%	55%	80%	81%	99%	78%	96%	97%	91%	R
	<i>Klebsiella</i> species	139	12%	R	93%	78%	n/a	88%	98%	96%	96%	R
	<i>Enterobacter</i> -like species*	98	8%	89%	96%	93%	n/a	85%	96%	**	96%	R
	<i>Proteus mirabilis</i>	48	4%	92%	98%	92%	R	90%	100%	100%	100%	R
	<i>Pseudomonas aeruginosa</i>	47	4%	R	R	R	R	R	94%	R	98%	R
Gram positives	<i>Staphylococcus saprophyticus</i>	11	1%	n/a	93%	93%	100%	96%	n/a	S	n/a	S
	<i>Streptococcus agalactiae</i> (group B strep)	57	5%	S	S	S	S	n/a	R	S	n/a	S
	<i>Enterococcus faecalis</i>	86	7%	S	S	R	100%	R	R	R	R	100%
	<i>Enterococcus faecium</i>	19	2%	R	R	R	n/a	R	R	R	R	41%

n/a	Not available - not routinely tested in this laboratory or no testing standard available
93%	> 90% of isolates susceptible
S	Susceptible by extrapolation or intrinsically susceptible
75%	70-89% of isolates susceptible
45%	< 70% of isolates susceptible
R	Intrinsically resistant
*	<i>Enterobacter</i> , <i>Serratia</i> , <i>Citrobacter</i> , <i>Providencia</i> , <i>Morganella</i> species (excludes <i>C. diversus</i> )
**	Resistance may emerge during therapy and agent NOT recommended for these species.
***	<i>S. saprophyticus</i> and <i>Enterococcus</i> susceptibilities based on the larger John Hunter Hospital data set for 2017
	Refer to <a href="http://www.aimed.net.au">www.aimed.net.au</a> for HNELHD restricted anti-infective indications.

## Upper and Lower Hunter Sector Urinary Isolate Cumulative Antibigram, 2016 & 2017

Includes Belmont and Maitland Hospitals.

Organism type	Isolates	% total	Unrestricted antibiotics						Restricted antibiotics			
			Ampicillin	Amoxicillin+clavulanate	Cefazolin / cephalixin	Nitrofurantoin	Trimethoprim	Gentamicin (aminoglycoside)	Ceftriaxone	Norfloxacin	Vancomycin	
All isolates	2,680	Some miscellaneous/contaminant species excluded.										
Gram negative isolates	<i>Escherichia coli</i>	1,683	63%	57%	82%	82%	100%	79%	97%	97%	93%	R
	<i>Klebsiella</i> species	207	8%	R	88%	77%	n/a	88%	96%	95%	94%	R
	<i>Enterobacter</i> -like species*	182	7%	R	R	R	n/a	88%	97%	**	97%	R
	<i>Proteus mirabilis</i>	112	4%	85%	97%	85%	R	78%	99%	98%	99%	R
	<i>Pseudomonas aeruginosa</i>	125	5%	R	R	R	R	R	98%	R	97%	R
Gram positives	<i>Staphylococcus saprophyticus</i>	56	2%	n/a	93%	93%	100%	96%	n/a	S	n/a	S
	<i>Streptococcus agalactiae</i> (group B strep)	138	5%	S	S	S	S	n/a	R	S	n/a	S
	<i>Enterococcus faecalis</i>	141	5%	S	S	R	100%	R	R	R	R	100%
	<i>Enterococcus faecium</i>	36	1%	R	R	R	n/a	R	R	R	R	36%

n/a	Not available - not routinely tested in this laboratory or no testing standard available
93%	> 90% of isolates susceptible
S	Susceptible by extrapolation or intrinsically susceptible
75%	70-89% of isolates susceptible
45%	< 70% of isolates susceptible
R	Intrinsically resistant
*	<i>Enterobacter, Serratia, Citrobacter, Providencia, Morganella</i> species (excludes <i>C. diversus</i> )
**	Resistance may emerge during therapy and agent NOT recommended for these species.
	Refer to <a href="http://www.aimed.net.au">www.aimed.net.au</a> for HNELHD restricted antiinfective indications.

## Maitland Hospital and Lower Hunter Sector Urinary Isolate Cumulative Antibigram, 2017

Organism type	Isolates	% total	Unrestricted antibiotics						Restricted antibiotics			
			Ampicillin	Amoxicillin+clavulanate	Cefazolin / cephalosin	Nitrofurantoin	Trimethoprim	Gentamicin (aminoglycoside)	Ceftriaxone	Norfloxacin	Vancomycin	
All isolates	1,582	Some miscellaneous/contaminant species excluded.										
Gram negative isolates	<i>Escherichia coli</i>	1,016	64%	56%	82%	82%	99%	79%	97%	97%	93%	R
	<i>Klebsiella</i> species	113	7%	R	87%	79%	n/a	88%	95%	94%	92%	R
	<i>Enterobacter</i> -like species*	99	6%	R	R	R	n/a	88%	96%	**	94%	R
	<i>Proteus mirabilis</i>	66	4%	85%	95%	84%	R	78%	100%	98%	100%	R
	<i>Pseudomonas aeruginosa</i>	70	4%	R	R	R	R	R	99%	R	99%	R
Gram positives	<i>Staphylococcus saprophyticus</i>	38	2%	n/a	93%	93%	100%	100%	n/a	S	n/a	S
	<i>Streptococcus agalactiae</i> (group B strep)	84	5%	S	S	S	S	n/a	R	S	n/a	S
	<i>Enterococcus faecalis</i>	81	5%	S	S	R	100%	R	R	R	R	100%
	<i>Enterococcus faecium</i>	15	1%	R	R	R	n/a	R	R	R	R	43%
												***

n/a	Not available - not routinely tested in this laboratory or no testing standard available
93%	> 90% of isolates susceptible
S	Susceptible by extrapolation or intrinsically susceptible
75%	70-89% of isolates susceptible
45%	< 70% of isolates susceptible
R	Intrinsically resistant
*	<i>Enterobacter</i> , <i>Serratia</i> , <i>Citrobacter</i> , <i>Providencia</i> , <i>Morganella</i> species (excludes <i>C. diversus</i> )
**	Resistance may emerge during therapy and agent NOT recommended for these species.
***	<i>Enterococcus faecium</i> vancomycin susceptibility based on the larger John Hunter Hospital data set for 2017
	Refer to <a href="http://www.aimed.net.au">www.aimed.net.au</a> for HNELHD restricted antiinfective indications.

## Manning Base Hospital and LMNC Sector Urinary Isolate Cumulative Antibigram, 2017

Organism type	Isolates	% total	Unrestricted antibiotics						Restricted antibiotics			
			Ampicillin	Amoxicillin+clavulanate	Cefazolin / cephalixin	Nitrofurantoin	Trimethoprim	Gentamicin (aminoglycoside)	Ceftriaxone	Norfloxacin	Vancomycin	
All isolates	843	Some miscellaneous/contaminant species excluded.										
Gram negative isolates	<i>Escherichia coli</i>	531	63%	58%	82%	85%	100%	84%	95%	98%	94%	R
	<i>Klebsiella</i> species	80	9%	R	94%	78%	n/a	87%	96%	95%	95%	R
	<i>Enterobacter</i> -like species*	42	5%	R	R	R	n/a	88%	95%	**	94%	R
	<i>Proteus mirabilis</i>	40	5%	93%	98%	91%	R	83%	100%	98%	95%	R
	<i>Pseudomonas aeruginosa</i>	32	4%	R	R	R	R	R	94%	R	94%	R
Gram positives	<i>Staphylococcus saprophyticus</i>	27	3%	n/a	93%	93%	100%	89%	n/a	S	n/a	S
	<i>Streptococcus agalactiae</i> (group B strep)	35	4%	S	S	S	S	n/a	R	S	n/a	S
	<i>Enterococcus faecalis</i>	49	6%	S	S	R	100%	R	R	R	R	n/a
	<i>Enterococcus faecium</i>	7	1%	R	R	R	n/a	R	R	R	R	n/a

n/a	Not available - not routinely tested in this laboratory or no testing standard available
93%	> 90% of isolates susceptible
S	Susceptible by extrapolation or intrinsically susceptible
75%	70-89% of isolates susceptible
45%	< 70% of isolates susceptible
R	Intrinsically resistant
*	<i>Enterobacter, Serratia, Citrobacter, Providencia, Morganella</i> species (excludes <i>C. diversus</i> )
**	Resistance may emerge during therapy and agent NOT recommended for these species.
	Refer to <a href="http://www.aimed.net.au">www.aimed.net.au</a> for HNELHD restricted antiinfective indications.

## Tamworth Hospital and Peel Sector Urinary Isolate Cumulative Antibigram, 2016 & 2017

Organism type	Isolates	% total	Unrestricted antibiotics						Restricted antibiotics			
			Ampicillin	Amoxicillin+clavulanate	Cefazolin / cephalixin	Nitrofurantoin	Trimethoprim	Gentamicin (aminoglycoside)	Ceftriaxone	Norfloxacin	Vancomycin	
All isolates	2,113	Some miscellaneous/contaminant species excluded.										
Gram negative isolates	<i>Escherichia coli</i>	1,277	60%	59%	97%	95%	98%	81%	98%	n/a	n/a	R
	<i>Klebsiella</i> species	152	7%	R	95%	92%	n/a	88%	97%	n/a	n/a	R
	<i>Enterobacter</i> -like species*	130	6%	R	R	R	n/a	89%	96%	**	n/a	R
	<i>Proteus mirabilis</i>	76	4%	96%	99%	100%	R	87%	100%	n/a	n/a	R
	<i>Pseudomonas aeruginosa</i>	138	7%	R	R	R	R	R	99%	R	n/a	R
Gram positives	<i>Staphylococcus saprophyticus</i>	47	2%	n/a	93%	93%	100%	96%	n/a	S	n/a	S
	<i>Streptococcus agalactiae</i> (group B strep)	79	4%	S	S	S	S	n/a	R	S	n/a	S
	<i>Enterococcus</i> species	214	10%	96%	S	R	98%	R	R	R	R	100%

n/a	Not available - not routinely tested in this laboratory or no testing standard available
93%	> 90% of isolates susceptible
S	Susceptible by extrapolation or intrinsically susceptible
75%	70-89% of isolates susceptible
45%	< 70% of isolates susceptible
R	Intrinsically resistant
*	<i>Enterobacter</i> , <i>Serratia</i> , <i>Citrobacter</i> , <i>Providencia</i> , <i>Morganella</i> species (excludes <i>C. diversus</i> )
**	Resistance may emerge during therapy and agent NOT recommended for these species.
	Refer to <a href="http://www.aimed.net.au">www.aimed.net.au</a> for HNELHD restricted antiinfective indications.

## Armidale/ Tablelands Urinary Isolate Cumulative Antibigram, 2016 & 2017

Organism type	Isolates	% total	Unrestricted antibiotics						Restricted antibiotics			
			Ampicillin	Amoxicillin+clavulanate	Cefazolin / cephalixin	Nitrofurantoin	Trimethoprim	Gentamicin (aminoglycoside)	Ceftriaxone	Norfloracin	Vancomycin	
All isolates	1,019	Some miscellaneous/contaminant species excluded.										
Gram negative isolates	<i>Escherichia coli</i>	663	65%	55%	80%	81%	100%	84%	95%	95%	89%	R
						235						
	<i>Klebsiella</i> species	74	7%	R	93%	78%	n/a	88%	98%	96%	95%	R
	<i>Enterobacter</i> -like species*	70	7%	R	R	R	n/a	77%	94%	**	89%	R
<i>Proteus mirabilis</i>	29	3%	92%	98%	92%	R	79%	100%	99%	99%	R	
<i>Pseudomonas aeruginosa</i>	21	2%	R	R	R	R	R	100%	R	100%	R	
										6		
Gram positives	<i>Staphylococcus saprophyticus</i>	29	3%	n/a	93%	93%	100%	97%	n/a	S	n/a	S
						24						
	<i>Streptococcus agalactiae</i> (group B strep)	29	3%	S	S	S	S	n/a	R	S	n/a	S
<i>Enterococcus</i> species	104	10%	90%	S	R	95%	R	R	R	R	95%	
											85	

n/a	Not available - not routinely tested in this laboratory or no testing standard available
93%	> 90% of isolates susceptible
S	Susceptible by extrapolation or intrinsically susceptible
75%	70-89% of isolates susceptible
45%	< 70% of isolates susceptible
R	Intrinsically resistant
*	<i>Enterobacter</i> , <i>Serratia</i> , <i>Citrobacter</i> , <i>Providencia</i> , <i>Morganella</i> species (excludes <i>C. diversus</i> )
**	Resistance may emerge during therapy and agent NOT recommended for these species.
	Refer to <a href="http://www.aimed.net.au">www.aimed.net.au</a> for HNELHD restricted antiinfective indications.

## Northern NSW Urinary Isolate Antibigram, 2017

Organism type	Isolates	% total	Unrestricted antibiotics						Restricted antibiotics			
			Ampicillin	Amoxicillin+clavulanate	Cefazolin / ceftalexin	Nitrofurantoin	Trimethoprim	Gentamicin (aminoglycoside)	Ceftriaxone	Norfloxacin	Vancomycin	
All isolates	4,548	Some miscellaneous/contaminant species excluded.										
Gram negative isolates	<i>Escherichia coli</i>	2,687	59%	58%	88%	87%	99%	77%	97%	95%	90%	R
	<i>Klebsiella</i> species	403	9%	R	93%	85%	n/a	91%	99%	96%	95%	R
	<i>Enterobacter</i> -like species*	333	7%	R	R	R	n/a	86%	96%	**	90%	R
	<i>Proteus mirabilis</i>	155	3%	84%	93%	87%	R	81%	96%	98%	97%	R
	<i>Pseudomonas aeruginosa</i>	289	6%	R	R	R	R	R	93%	R	97%	R
Gram positives	<i>Staphylococcus saprophyticus</i>	162	4%	n/a	96%	96%	99%	93%	n/a	S	n/a	S
	<i>Streptococcus agalactiae</i> (group B strep)	126	3%	S	S	S	S	n/a	R	S	n/a	S
	<i>Enterococcus faecalis</i>	325	7%	S	S	R	100%	R	R	R	R	100%
	<i>Enterococcus faecium</i>	68	1%	R	R	R	n/a	R	R	R	R	56%

n/a	Not available - not routinely tested in this laboratory or no testing standard available
93%	> 90% of isolates susceptible
S	Susceptible by extrapolation or intrinsically susceptible
75%	70-89% of isolates susceptible
45%	< 70% of isolates susceptible
R	Intrinsically resistant
*	<i>Enterobacter</i> , <i>Serratia</i> , <i>Citrobacter</i> , <i>Providencia</i> , <i>Morganella</i> species (excludes <i>C. diversus</i> )
**	Resistance may emerge during therapy and agent NOT recommended for these species.
Ampicillin	Refer to CEC site for restricted anti-infective indications: <a href="http://www.cec.health.nsw.gov.au/__data/assets/pdf_file/0003/258726/QUAH-AMS-Toolkit-List-of-Recommended-Antimicrobial-Restrictions-FEB-2017.pdf">http://www.cec.health.nsw.gov.au/__data/assets/pdf_file/0003/258726/QUAH-AMS-Toolkit-List-of-Recommended-Antimicrobial-Restrictions-FEB-2017.pdf</a>



## Mid-North Coast Urinary Isolate Antibiogram, 2017

Organism type	Isolates	% total	Unrestricted antibiotics						Restricted antibiotics			
			Ampicillin	Amoxicillin+clavulanate	Cefazolin / cephalixin	Nitrofurantoin	Trimethoprim	Gentamicin (aminoglycoside)	Ceftriaxone	Norfloxacin	Vancomycin	
All isolates	2,114	Some miscellaneous/contaminant species excluded.										
Gram negative isolates	<i>Escherichia coli</i>	1,281	61%	60%	94%	95%	98%	79%	96%	n/a	94%	R
										643		
	<i>Klebsiella</i> species	206	10%	R	94%	96%	n/a	92%	99%	n/a	98%	R
										97		
	<i>Enterobacter</i> -like species*	112	5%	R	R	R	n/a	77%	95%	**	94%	R
									50			
<i>Proteus mirabilis</i>	71	3%	83%	94%	94%	R	87%	99%	n/a	100%	R	
									30			
<i>Pseudomonas aeruginosa</i>	144	7%	R	R	R	R	R	99%	R	97%	R	
									72			
Gram positives	<i>Staphylococcus saprophyticus</i>	87	4%	n/a	93%	93%	89%	92%	n/a	S	n/a	S
	<i>Streptococcus agalactiae</i> (group B strep)	39	2%	S	S	S	S	n/a	R	S	n/a	S
	<i>Enterococcus faecalis</i>	150	7%	S	S	R	99%	R	R	R	R	100%
	<i>Enterococcus faecium</i>	24	1%	R	R	R	n/a	R	R	R	R	71%

n/a	Not available - not routinely tested in this laboratory or no testing standard available
93%	> 90% of isolates susceptible
S	Susceptible by extrapolation or intrinsically susceptible
75%	70-89% of isolates susceptible
45%	< 70% of isolates susceptible
R	Intrinsically resistant
*	<i>Enterobacter</i> , <i>Serratia</i> , <i>Citrobacter</i> , <i>Providencia</i> , <i>Morganella</i> species (excludes <i>C. diversus</i> )
**	Resistance may emerge during therapy and agent NOT recommended for these species.
Ampicillin	Refer to CEC site for restricted anti-infective indications: <a href="http://www.cec.health.nsw.gov.au/__data/assets/pdf_file/0003/258726/QUAH-AMS-Toolkit-List-of-Recommended-Antimicrobial-Restrictions-FEB-2017.pdf">http://www.cec.health.nsw.gov.au/__data/assets/pdf_file/0003/258726/QUAH-AMS-Toolkit-List-of-Recommended-Antimicrobial-Restrictions-FEB-2017.pdf</a>