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Coastal ASPIRES Antimicrobial Stewardship

Antimicrobial Stewardship is...RIGHT diagnosis, RIGHT drug,
RIGHT dose, RIGHT route, RIGHT interval, RIGHT duration!

LGH IMPLEMENTATION

- Local team launched April 2018
- Antimicrobial Assessment Service
- Penicillin Allergy Assessment Service
- ID consult for all patients with Staph aureus bacteremia
- North Shore Community IV Program Streamlining

COASTAL SITE ENGAGEMENTS COMING UP

- 10 Sept 2018 - Bella Coola teleconference
- 10 Sept 2018 - Squamish Grand Rounds
- 12 Sept 2018 - Whistler MAC meeting
- 12 Sept 2018 - Pemberton physician meeting
- TBD - Sechelt, Bella Bella, Powell River

More to come . . .

- Using cefazolin for surgical prophylaxis in patients with penicillin allergy
- Coastal formulary restriction review

Question? Call 604-417-8921

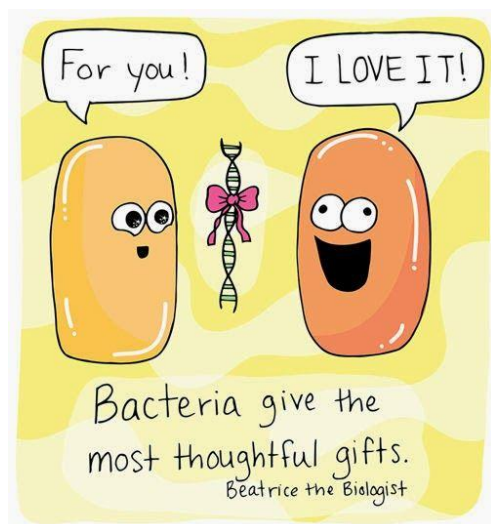


Reserved Antimicrobial Drugs

Ceftazidime
Daptomycin
Linezolid
Meropenem
Tigecycline

Targeted Drugs

Aminoglycosides IV
Azithromycin IV
Moxifloxacin IV
Ceftriaxone
Piperacillin-tazobactam
Vancomycin IV



Restricted Drugs

Amphotericin B Liposomal
Ertapenem (for outpatient use only)
Imipenem-cilastatin
Micafungin
Posaconazole
Voriconazole

Group 1 - IV to PO Stepdown (similar drug levels achieved with oral dosage form of same drug)

Ciprofloxacin IV
Clindamycin IV
Co-trimoxazole IV
Fluconazole IV
Linezolid IV
Moxifloxacin IV
Metronidazole IV
Voriconazole IV

Group 2 - IV to PO Stepdown (lower drug levels achieved with oral dosage form of same drug)

Acyclovir IV
Ampicillin IV
Azithromycin IV
Cefazolin IV
Cefuroxime IV
Penicillin G IV

Question? Call 604-417-8921



Antibiogram Jan - Dec 2017 Sea to Sky CoC

GRAM POSITIVE ORGANISMS

	N	Penicillin*	Ampicillin/ Amoxicillin†	ceFAZolin/†	Cephalexin	Ceftriaxone	Doxycycline	Macrolides	Clindamycin	TMP-SMX	Moxifloxacin	Vancomycin	Ciprofloxacin (urine)
<i>Staphylococcus aureus (all)</i>	1386			83		98			82	97	76	100	
methicillin-susceptible	N/A			100		99			85	98	84	100	
methicillin-resistant	N/A			0		97			53	93	43	100	
<i>Staphylococcus lugdenensis</i>	120			99		100			85	99	93	100	
<i>Staphylococcus epidermidis</i>	45			48		85			52	64	77	100	
Viridans group <i>Streptococcus</i>	91	94	94			100	76		86		99	100	
<i>Streptococcus pneumoniae</i>	47	100	100			100	69	78			100	100	
<i>S. pneumoniae (meningitis)</i>	VCH	83				100						100	
<i>Streptococcus pyogenes (GAS)</i>	259	100	100			100	61	73	73		100	100	
<i>Streptococcus agalactiae (GBS)</i>	158	100	100			100	25	57	61		97	100	
<i>Enterococcus faecalis</i>	505		100									99	55
<i>Enterococcus faecium</i>	59		17									59	5
vancomycin-susceptible	VCH		19									100	1
vancomycin-resistant	VCH		0									0	0

* penicillin predicts all beta lactams for streptococci †= ampicillin predicts piperacillin and imipenem for enterococcus

‡ cefazolin predicts cloxacillin, piperacillin-tazobactam and carbapenems for staphylococci

GRAM NEGATIVE ORGANISMS

	N	Amoxicillin/ Ampicillin	Amoxicillin- Clavulanate	Cefazolin*	Ceftriaxone	Ceftazidime	TMP-SMX	Ciprofloxacin	Gentamicin	Piperacillin- Tazobactam	Meropenem	Nitrofurantoin (urine)
<i>Escherichia coli</i>	2533	63	87	90	93		79	83	93	99	100	98
<i>Klebsiella pneumoniae</i>	326	0	94	94	95		94	97	98	98	100	36
<i>Klebsiella oxytoca</i>	80	0	90	83	95		98	98	100	95	99	81
<i>Citrobacter species</i>	94	0	28	3	86		91	97	96	99	100	70
<i>Enterobacter aerogenes</i>	51	0	0	0	88		98	98	100	90	100	8
<i>Enterobacter cloacae</i>	42	0	0	0	73		100	95	98	81	100	18
<i>Proteus mirabilis</i>	230	82	97	47	98		85	87	93	100	100	0
<i>Morganella morganii</i>	50	0	0	0	100		80	86	92	100	100	0
<i>Serratia marcescens</i>	37	0	0	0	89		100	97	100	95	97	0
<i>Pseudomonas aeruginosa</i>	177	0	0	0	0	95		95	97	96	91	0
<i>Acinetobacter (all)</i>	43	0	0	0	0	81	86	93	95	95	98	0

*cefazolin predicts ceftriaxone if not reported

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Type 1 hypersensitivity (IgE) = anaphylaxis, urticaria, angioedema, pruritus

Recent studies have shown that **type 1 hypersensitivity cross-reactions** between penicillins and cephalosporins is in fact due to similarities in **side chains** and not the **beta-lactam rings**.

Cefazolin is not expected to cross-react with any penicillin/cephalosporin as it has a unique side chain structure.

Call ASPIRES team for assistance with
Penicillin Allergy Assessment!

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