## **Adult Antibiotic Dosing Recommendations**

#### Amoxicillin (Amoxil):\*

1 gram PO every 8 hours for pneumonia. May use 500 mg to 1 gram PO every 8 hours for most indications.

### Amoxicillin/clavulanate (Augmentin)\*:

 $875~\mathrm{mg}$  PO BID for most indications; may increase to every 8 hours for intra-abdominal infections

#### Azithromycin:

500 mg x 1 on day 1 followed by 250 mg PO daily x 4 days May also consider 500 mg po daily x 3 days

#### Cefdinir\*:

300 mg PO BID

#### Cephalexin\*:

500 mg PO every 6 hours

#### Ciprofloxacin\*:

500 mg to 750 mg PO BID

#### Doxycycline:

100 mg PO BID

#### Levofloxacin\*:

500 mg to 750 mg PO daily

#### Metronidazole:

500 mg PO every 8 hours

# Nitrofurantoin monohydrate/macrocrystals\*\*:

100 mg PO BID

- \* Renal dose adjustments may be required
- \*\*Avoid use in geriatric patients and CrCl < 30 mL/min

#### **Antimicrobial Stewardship Principles**

**REDUCING GENERAL ANTIBIOTIC USE:** Some illnesses may not need antibiotics at all (self-limiting illness, non-bacterial illnesses)

**SHORTENING THE COURSE:** Most illnesses that are managed outpatient only need 3 to 5 days of antibiotics

**AVOIDING RESISTANCE:** Agents that have more than 10% resistance rates to the target microbe according to the local antibiogram should not be used when alternatives agents are available

**NARROWING ANTIBIOTIC SPECTRUM:** Many infection can be managed with antibiotics that are less broad than fluoroquinolones

Ensuring patients receive the right antibiotic, at the right dose, at the right time, and for the right duration reduces mortality, risk of Clostridium difficile-associated diarrhea, hospital stays, overall antimicrobial resistance within the facility, and costs.

#### **Shorter Duration of Antibiotic Therapy**

INFECTION	DAYS OF THERAPY
Community Acquired Pneumonia	5 Days
Ventilator Associated Pneumonia	≤ 8 Days
Uncomplicated Cystitis	3 to 5 Days
Pyelonephritis	5 to 7 Days
Intra-abdominal Infection	4 Days
Cellulitis	5 Days
Acute Bacterial Sinusitis	5 Days
Neutropenic Fever	Afebrile x 72 Hours

#### **Verigene Resistance Markers**

ORGANISMS	RESISTANCE GENE	INTERPRETATION								
Staphylococcus aureus OR	None	None								
S. epidermidis	MecA	Methicillin Resistance								
Enterococcus faecalis OR	None	None								
E. faecium	Van A or Van B	Vancomycin Resistance								
Escherichia coli,	None	None								
Klebsiella pneumoniae, Klebsiella oxytoca	CTX-M	ESBL Producing Organism								
Medalena oxytoca	KPC, NDM, OXA or VIM	CRE/MDR Organism*								
Pseudomonas sp. OR	None	None								
Enterobacter sp.	CTX-M	ESBL Producing Organism								
Pseudomonas aeruginosa	None	None								
	IMP, KPC, NDM, OXA or VIM	CRPA/MDR Organism*								
Acinetobacter species	None	None								
	IMP or OXA	CRAB/MDR Organism*								
Enterobacter species	None	None								
	CTX-M	ESBL producing organism								
	KPC, NDM, IMP or VIM	CRE/MDR organism*								

\*ID Consult Recommended



# Adult Outpatient/ED Antibiotic Recommendations for SJMC

Approved by the Antimicrobial Stewardship Committee & Infection Control Committee

INFECTION	1ST LINE	ALTERNATIVE / ALLERGY						
Asymptomatic Bacteriuria	Do not treat with an	tibiotics*						
Uncomplicated Cystitis (Symptomatic)	Nitrofurantoin**	Cephalexin						
Uncomplicated Pyelonephritis***	Cefdinir	Ciprofloxacin						
Diverticulitis/colitis	Ciprofloxacin <b>PLUS</b> Metronidazole	Cefdinir <b>PLUS</b> Metronidazole						
Community acquired pneumonia (CAP) – No comorbidities or risk factors for MRSA or Pseudomonas	Amoxicillin	Azithromycin <b>OR</b> Doxycycline						
CAP with comorbidities (chronic heart, lung, liver, or renal disease, diabetes mellitus, alcoholism, malignancy or asplenia)	Amoxicillin- Clavulanate <b>PLUS</b> Azithromycin	Cefdinir <b>OR</b> Cefuroxime <b>PLUS</b> Azithromycin <b>OR</b> Doxycycline						
Skin & Soft Tissue/ Cellulitis	Cephalexin <b>OR</b> TMP/SMP (if Staph suspected)	Doxycycline <b>OR</b> Clindamycin						
Sinusitis	Amoxicillin- Clavulanate	Doxycycline						

- \* Unless the patient is pregnant or undergoing genitourinary system intervention
- \*\*Avoid use in geriatric patients and CrCl < 30 mL/min
- \*\*\*Ensure patient received a parenteral antibiotic prior to discharge (i.e. ceftriaxone 1 gram IV/IM x 1)

INDICATION	NOTES	EXCEPTIONS
Nephrolithiasis	Not usually infectious	Unless UTI also present
Gastroenteritis	Usually viral and/or self-limiting	Unless traveler's diarrhea
Bronchitis	Only 6% of cases are bacterial	Unless pertussis suspected
COPD exacerbation per GOLD guidelines	Antibiotics only indicated when increased purulence of sputum AND either increased sputum volume or dyspnea	Admission to ICU, recommended duration 5 days
Diarrhea	Usually self- limiting	Unless C diff or traveler's diarrhea

# St. Joseph's Medical Center - Stockton - Emergency Department Antibiogram 01/01/2023- 12/31/2023

					Penici	llins					Ceph	alosp	orins		Carl	papene	ms	Aminoglycosides			Fluoro	Other									
Percent (%) susceptible	# Tested (n)	Ampicillin	Amoxicillin	Oxacillin	Penicillin	Piperacillin/Tazo	Ticarcillin	Ticar/Clav Acid	Amp/Sulbactam	Cefazolin	Cefepime	Cefotaxime	Ceftazidime	Ceftriaxone	Ertapenem	Imipenem	Meropenem	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Clindamycin	Erythromycin	Linezolid	Rifampin	Trimeth/Sulfa	Daptomycin	Tetracycline	Vancomycin	Nitrofrurantoin*
Gram negative rods:																															
Enterobacter cloacae complex	32	0							0		97		88	91	100	100		100	94	94	84	84									41
Escherichia coli	1451	50				97			61	83	88		88	88	100	100		100	89	88	79	80					73				98
Klebsiella pneumoniae	238	0				98			83	90	91		91	91	100	100		100	96	94	93	96					86				33
Proteus mirabilis	163	80				100			88	87	92		91	91	99			99	89	90	78	79					80		0		0
Pseudomonas aeruginosa	97	0				93	85		0		96	0	94	0	0	90	99	97	0	0	77	77					0		0		
Gram positive cocci:																															
Enterococcus faecalis	189	99																			*75	*76			99					95	99
Staphylococcus aureus	108			57							Noni								90		59	58	75	42	100	99	94	100	81	100	100

<sup>\*</sup> Urinary Tract isolates only

Non urine

>= 5% more resistant 2023 than 2022

>= 5% more sensitive 2023 than 2022