ANTIMICROBIAL GUIDELINES – NORTHERN MICHIGAN 2023-2024

Adult doses – Assuming normal renal function

Infection	Preferred	Alternatives
Streptococcal Pharyngitis (based on strep screen or culture)	• Penicillin VK 500mg BID x 10 d, or • Amox 500mg BID or 1gm QD x 10 d	• Azithromycin (Zpak) or • Cephalexin 500mg BID x 10 d
Acute Bacterial Sinusitis (Symptoms typically > 10 days)	• Abx not usually required • Amox/clav 875 mg BID x 5 d	Doxycycline 100 mg BID x 5 d
Chronic Sinusitis	Value of antibiotics uncertain. Consider ENT/Allergy consult	
Acute otitis media (Abx not always required)	Amox/clav 875/125 mg BID x 5-10 d* *5-7 d for mild-mod, 10 d for severe	• Cefdinir 300 mg BID x 5-10 d • Cefuroxime 500 mg BID x 5-10 d • Amoxicillin 1 gm TID x 5-10 d
Acute Bronchitis (Usually viral)	**No antibiotics** - Consider testing for Pertussis, Chlamydia, Mycoplasma, and/or common circulating viruses such as RSV or COVID-19	
Acute exacerbation chronic bronchitis (Abx not always required)	• Azithromycin 500mg daily x 3 d or • Doxycycline 100mg BID x 5 d	• Cefuroxime 500 mg BID x 5 d or • Amox/clav 875 mg BID x 5 d
Community-Acquired Pneumonia (CAP) OP - Uncomplicated	Amoxicillin 1 gm TID x 5 d	• Azithromycin 500 mg QD x 3d or • Doxycycline 100mg BID x 5 d
CAP (OP) – Comorbidities	Amox/clav 875/125 BID, or Cefuroxime 500 mg BID x 5 d, + Azithromycin or Doxycycline x 5 d	• Levofloxacin 750mg daily x 5 d
CAP (IP) – Non-ICU & ICU CAP can be treated for 5 days if: Afebrile x 48 hr and clinically improving	Ceftriaxone 1 gm daily + Azithromycin 500mg daily^ *5 d duration if clinically improving at day 5. ^Azithromycin duration is 500 mg x 3 days or Zpak (5 days)	Levofloxacin 750 mg daily x 5 d* *5 d duration if clinically improving at day 5. Procalcitonin WNL may assist in stopping antibiotics early before planned end date in all pneumonia
Hospital-acquired Pneumonia (HAP) & Ventilator associated Pneumonia (VAP) • MRSA nasal swabs have high (>95%) negative predictive value for MRSA PNA • MRSA nasal swab positive predictive value is LOW (<30%) given low incidence in our area	Cefepime 2 gm Q8hr x 5-7 d Add MRSA Coverage (Vancomycin* or Linezolid 600mg Q12hr x 5-7 d) if any present: • IV antibiotics within 90 days • Septic shock • Need for ventilator support due to pneumonia	Pip-tazo 4.5gm Q8h 4hr INF x 5-7d MRSA coverage criteria (left): Add Vancomycin* or Linezolid 600mg Q12hr x 5-7 d
Aspiration Pneumonia (Anaerobic bacteria are uncommon in the absence of empyema or lung abscess)	Witnessed event does not require antibiotics. Consider monitoring for 48hr prior to starting antibiotics.	• Ampicillin/Sulbactam 3 gm Q6h x 5-7 d • Ceftriaxone 1 gm daily x 5-7 d
Asymptomatic Bacteriuria	**No antibiotics,** unless pregnant or urologic procedure with mucosal bleeding ***Urine culture not indicated in the absence of urinary symptoms***	
Cystitis – Uncomplicated (non-pregnant females)	• Nitrofurantoin monohydrate / macrocrystals 100mg BID x 5 d or • TMP-SMX DS BID x 3 days, or • Fosfomycin 3 gm x 1 dose	• Cephalexin 500mg BID x 7 d, or • Gentamicin 5 mg/kg IVPB x 1 FQs are not recommended

Infection	Preferred	Alternatives
Cystitis – Complicated, without sepsis or bacteremia • Duration: 7 days usually appropriate. Up to 10 days if delayed response	• Ceftriaxone 1 gm Q24hr x 7d • Nitrofurantoin 100 mg BID x 7d • TMP-SMX 1 DS BID x 7d	• Pip-tazo 4.5 gm Q8hr (based on prev. urine cultures) • Fosfomycin 3gm Q48hr x 3 doses • Gentamicin 5mg/kg IV x 1-3 days
Pyelonephritis – uncomplicated	Ceftriaxone 1 gm Q24hr, with step-down to TMP-SMX (if susceptible) x 7-14 d	• TMP-SMX 1 DS BID x 7-14 d • Ciprofloxacin 500 mg BID x 7 d • Levofloxacin 750 mg QD x 5 d
Complicated cystitis or pyelonephritis with sepsis or Bacteremia • Duration: 7-14 days based on clinical response, source control, organism & immune status	• Beta-lactam IV initially, with stepdown to either Cipro/Levo or TMP-SMX • 7-day duration if the following criteria are met: 1.) enteric Gram negative, 2.) non-pregnant, 3.) immunocompetent, 4.) transient bacteremia, 5.) with adequate source control, and 6.) afebrile/hemodynamically stable at day 7. • Consider ID consult for *Pseudomonas* bacteremia, Gram positive bacteremia, immunocompromised, or circumstances with delayed/inadequate source control	
Diverticulitis– uncomplicated (OP, see DINAMO Trial, 2021)	**No antibiotics** in the absence of sepsis, perforation, obstruction, or abscess	
Peritonitis, intra-abd abscess, pelvic abscess, complicated diverticulitis • If no/inadequate source control, duration depends on response.	• Ceftriaxone 2 gm Q24hr + Metronidazole 500mg Q8hr • Pip-tazo 4.5 gm Q8H 4hr INF Duration: 5 days after adequate source control i.e. OR drainage.	Levofloxacin 750 mg Q24hr + metronidazole 500mg Q8hr Duration: 5 days after adequate source control i.e. OR drainage.
Clostridioides difficile colitis Initial episode	• Fidaxomicin 200 mg PO BID x 10 d ($$$$$, but less recurrence rates) • Vancomycin 125 mg PO QID x 10 d ($, higher rate of recurrence)	
Clostridioides difficile colitis Recurrence	1st recurrence*: Fidaxomicin 200 mg BID x 10 d, Alt: Vancomycin pulse/taper 2nd or subsequent recurrence*: ID and/or GI consult *Consider Bezlotoxumab to prevent further recurrence in high-risk patients	
Clostridioides difficile colitis Fulminant (hypotension or shock, ileus, megacolon)	Vancomycin 500mg PO QID + Metronidazole 500 mg IVPB Q8H until gut is functioning	ID and/or GI Consult
Purulent Cutaneous Abscess – (mild-moderate) I&D, culture	• TMP-SMX DS BID x 7 d or • Doxycycline 100mg PO BID x 7 d	Linezolid 600 mg PO BID x 7 d
Cellulitis – Non-purulent (mild – moderate) • Symmetrical, bilateral erythema more likely stasis dermatitis than cellulitis	• Pen VK 500 mg QID x 5-7 d or • Cephalexin 500mg QID x 5-7 d	Doxycycline 100mg BID x 5-7 d
Diabetic Foot Infection (OP) • Duration: 1 to 2 weeks depending on severity	Amox/clav 875 mg BID + (TMP-SMX DS BID or Doxycycline 100mg BID if MRSA suspected)	TMP-SMX DS BID +/- Metronidazole 500 mg TID
Diabetic Foot Infection (IP) • If stable, hold Abx until deep cultures obtained	• Ampicillin/sulbactam 3gm IV Q6hr • Add vancomycin* if MRSA suspected *Duration depends on clinical findings	Ceftriaxone 2gm QD + Metronidazole 500mg Q8hr (Add Vancomycin* if MRSA suspected)
Dog, Cat, Human Bite • Give tetanus booster if last dose was >5 years ago • If deep structure, I&D and use IV	• Amox/Clav 875mg BID x 7 d (OP) • Ampicillin/sulbactam 3gm IVPB Q6H x 7 d if soft tissue only (IP)	TMP-SMX DS BID or Doxycycline 100 mg BID + metronidazole 500 mg TID x 7d

***Pharmacy to dose **ID consult required at MMC**

In complicated cases consider consultation with your infectious diseases physician and pharmacist.

After 48 hours of antimicrobial therapy, reassess for appropriateness and opportunities for de-escalation