Kentucky Antimicrobial Stewardship Innovation Consortium

Outpatient Treatment Guidance

Empiric Recommendations for Common Infections for Adult Outpatients

Acute Bacterial Pharyngitis (Group A Strep, *Streptococcus* spp.) Treatment is not recommended for patients with viral pharyngitis		Duration
Preferred	Penicillin V 500 mg BID **OR** Amoxicillin 500 mg BID	10 Days
Alternative, Penicillin Allergy	Cephalexin 500 mg BID **OR** Clindamycin 300 mg TID	10 Days

Acute Bacterial Rhinosinusitis (*S. pneumoniae, H. influenzae, M. catarrhalis)* Mild: Afebrile, no purulent nasal discharge, no facial pain longer than 3-4 days. Severe: Fever, purulent nasal discharge, facial pain longer than 3-4 consecutive days, or worsening symptoms after 5-6 days ("double sickening")			Duration
Mild	***No antimicrobial treatment warranted empirically***. "Watchful waiting" with symptomatic management is recommended. Most sinusitis is viral and will spontaneously improve. *If no improvement after **10 Days** of symptomatic treatment/supportive care:*		
	Preferred	Amoxicillin/Clavulanate 2000/125 mg BID*	5 Days
	Alternative	Amoxicillin/Clavulanate 875/125 mg BID **OR** Doxycycline 100 mg BID **OR** Cefpodoxime 200 mg BID	5 Days
Severe	Treat empirically with antibiotics, "watchful waiting" **NOT** indicated		
	Preferred	Amoxicillin/Clavulanate 2000/125 mg BID*	5-7 Days
	Alternative	Amoxicillin/Clavulanate 875/125 mg BID **OR** Doxycycline 100 mg BID **OR** Cefpodoxime 200 mg BID	5-7 Days
*High-dose amoxicillin-clavulanate is preferred in those with a risk of a poor outcome include patients ≥65 years, recently hospitalized, antibiotic use in 30 days, immunocompromised or in areas with >10% resistance to *S. pneumoniae*. When amoxicillin-clavulanate (Augmentin XR™ 1,000/62.5 mg) is not available or accessible, amoxicillin/clavulanate 875/125mg BID is preferred over alternative options.			

Non-purulent Cellulitis (*Streptococcus pyogenes*, also know as Group A Strep)		Duration
Preferred	Cephalexin 1000 mg TID **OR** Amoxicillin 875 mg BID	5 Days
Alternative	Sulfamethoxazole/Trimethoprim 1600/320 mg (2DS) BID **OR** Dicloxacillin 500 mg QID	5 Days

Abscess or Purulent Cellulitis (*Staphylococcus aureus*, including MRSA and MSSA) Prioritize I&D for primary treatment of abscess. Antimicrobials not always recommended if small and drained		Duration
Preferred	Doxycycline 100 mg BID	7 Days
Alternative	Sulfamethoxazole/Trimethoprim 1600/320 mg (2DS) BID **OR** Clindamycin 450 mg TID	7 Days

Antibiotic preferences incorporate guideline recommendations and local Kentucky outpatient resistance patterns.
Please follow recommended dose adjustments when necessary for patients with impaired renal function. Sep 2023

Otitis Externa (*Pseudomonas aeruginosa, Staphylococcus aureus, Streptococcus spp.*) Topical treatments are recommended for most cases. Referral to ENT should be considered for patients failing to respond to therapy after 1 week or if systemic agents are required.			Duration
Intact Tympanic Membrane	Mild	Acetic acid 2% otic solution	7 Days
	Moderate-Severe	Ciprofloxacin 0.3%-dexamethasone 1% otic solution **OR** Ciprofloxacin 0.2%-hydrocortisone 1% otic solution **OR** Neomycin-polymixin B-hydrocortisone otic solution **OR** Tobramycin 0.3%-dexamethasone 0.1% otic solution	7 Days
Not Intact Tympanic Membrane (or Unknown status)	Ciprofloxacin 0.3%-dexamethasone 1% otic solution **OR** Ofloxacin 0.3% otic solution		7 Days
Adjunctive	Wick placement is recommended for those with obstruction or swelling to improve delivery of the topical drugs. May require additional systemic therapy.		

Uncomplicated Cystitis (*E. coli, Klebsiella spp., Proteus spp.)* Uncomplicated**:** Non-pregnant, no recent instrumentation, no known structural/functional abnormalities, or other suspicion for pyelonephritis		Duration
Preferred	Nitrofurantoin 100 mg BID	5 Days
Alternative	Cephalexin 500 mg BID **OR**	5 Days
	Sulfamethoxazole/Trimethoprim 800/160 mg (1DS) BID **OR**	3 Days
	Fosfomycin trometamol 3,000 mg x1 dose*	1 Day
*Fosfomycin packets may carry cost barriers compared to other options. Recommend addressing financial expectations or burdens prior to prescribing this agent to reduce delays in treatment.		

Uncomplicated Pyelonephritis (*E. coli, Klebsiella spp., Proteus spp.)* Uncomplicated: Non-pregnant, no recent instrumentation, or no known structural/functional abnormalities		Duration
Preferred	Gentamicin 5-7 mg/kg* IM once **OR** Ceftriaxone 1 g IM x1 dose ***followed by*** Sulfamethoxazole/Trimethoprim 800/160 mg (1DS) BID	7 Days
Alternative	Gentamicin 5-7 mg/kg* IM once **OR** Ceftriaxone 1 g IM x1 dose ***followed by*** Amoxicillin/Clavulanate 875/125 mg BID **OR** Cefpodoxime 200 mg BID **OR** Ciprofloxacin 500 mg BID	7 Days
A single dose of an intramuscular antibiotic followed by a course of one of the above oral agents is recommended for pyelonephritis when treated outpatient		
*For gentamicin, use adjusted body weight in patients with total body weight >20% than ideal body weight	AdjBW = IBW + [0.4 x (TBW - IBW)] IBW (male) = 50 kg + 2.3 kg for each inch over 5 feet IBW (female) = 45 kg + 2.3 kg for each inch over 5 feet	

Community Acquired Pneumonia (*S. pneumoniae, H. influenzae, M. catarrhalis)* Comorbidities include: Chronic heart, lung, liver, renal disease, alcoholism, malignancy, or asplenia		Duration
Preferred	Amoxicillin 1,000 mg TID	5 Days
Alternative	Doxycycline 100 mg BID **OR** Cefpodoxime 200 mg BID	5 Days
Patient with Comorbidities	Amoxicillin/Clavulanate 875/125 mg BID ***Plus*** Azithromycin 500 mg x1 then 250 mg thereafter	5 Days

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Acute Exacerbations of COPD *(C. pneumoniae, M. pneumoniae, S. pneumoniae, M. catarrhalis, H. influenzae)*

AECOPD treatment involves steroids and bronchodilators, but does not routinely require antibiotics. Antibiotics are indicated for patients with the following 3 cardinal symptoms: increased dyspnea, sputum production, and sputum purulence. If increased sputum purulence is present, then treatment is indicated if only 2 symptoms are present.

		Duration
Preferred	Doxycycline 100 mg BID **OR**	5 Days
	Azithromycin 500 mg x1 dose then 250 mg **OR**	5 Days
	Azithromycin 500 mg daily	3 Days
Recent Treatment	Amoxicillin/Clavulanate 875/125 mg BID **OR** Cefpodoxime 200 mg BID **OR** Cefuroxime 500 mg BID	5 Days
History of *P. aeruginosa*	Levofloxacin 750 mg daily	5 Days

Gonorrhea and Chlamydia

Presumptive treatment for both Gonorrhea and Chlamydia is recommended if Chlamydia cannot be ruled out

			Duration
Gonorrhea, Preferred	<150 kg	Ceftriaxone 500 mg IM x1 dose	1 Day
	≥150 kg	Ceftriaxone 1,000 mg IM x1 dose	
Gonorrhea, Alternative	Gentamicin 240 mg Intramuscular x1 dose ***plus*** Azithromycin 2,000 mg x1 dose		1 Day
Chlamydia, Preferred	Doxycycline 100 mg BID		7 Days
Chlamydia, Alternative	Azithromycin 1,000 mg x1 dose		1 Day

STI Additional Notes

Re-testing	Any person who has a positive test for chlamydia or gonorrhea, along with women who have a positive test for trichomonas, should be rescreened **3 months** after treatment
Expedited Partner Therapy (EPT)	CDC supports issuing prescriptions to sex partners of those diagnosed with chlamydia or gonorrhea **without** the provider first examining the partner. EPT provides additional facilitation to treat partners with limited healthcare access.

Trichomoniasis and Bacterial Vaginosis *(Trichomonas vaginalis;* Dysbiosis of vaginal flora)

			Duration
Trichomoniasis	Female	Metronidazole 500 mg BID	7 Days
	Male	Metronidazole 2,000 mg x 1 dose	1 Day
Bacterial Vaginosis	Oral	Metronidazole 500 mg BID	7 Days
	Topical	Metronidazole 0.75% gel, 5 g vaginally once daily	5 Days
		Clindamycin 2% cream, 5 g vaginally once daily	7 Days

Vulvovaginal Candidiasis (*Candida albicans*) Most agents/formulations available OTC. '*' denotes prescription only. Topicals recommended in pregnancy			Duration
Oral	Fluconazole*	150 mg x 1 dose May repeat 72 hours later for those with moderate symptoms	1+ Day(s)
Vaginal Cream	Clotrimazole	1% Vaginal cream, 5 g once daily	7 Days
		2% Vaginal cream, 5 g once daily	3 Days
	Miconazole	2% Vaginal cream, 5 g once daily	7 Days
		4% Vaginal cream, 5 g once daily	3 Days
Vaginal Tablet	Clotrimazole	100 mg vaginally once daily	7 Days
		200 mg vaginally once daily	3 Days
		500 mg vaginally x1 dose	1 Day
Vaginal Suppository	Miconazole	100 mg vaginal suppository once daily	7 Days
		200 mg vaginal suppository once daily	3 Days
Refractory or Alternative	Nystatin Suppository* 100,000 units vaginally once daily		14 Days

Guideline References

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