Health PEI: Antimicrobial Stewardship Subcommittee

Duration of Therapy Guideline - Antimicrobials

Infection	Recommended duration	Comments
Urinary Tract Infections		
Uncomplicated Cystitis (Women)	Nitrofurantoin (MacroBID) – 5 days TMP-SMX – 3 days Fosfomycin – 1 dose Beta-lactams – 5 -7 days	• Applies to non-pregnant female patients with normal urinary tracts. • Seven day duration for beta-lactams may be considered for those with symptoms > 6 days.
First Episode Cystitis (Men)	Nitrofurantoin (MacroBID) – 5 - 7 days TMP-SMX – 7 days Fosfomycin – 2 doses (q3d apart)	• Recurrent episodes are suggestive of prostatitis.
Pyelonephritis/ Urosepsis	Quinolones – 5 - 7 days Other antibiotic classes – 7 - 14 days	• Excludes patients with urogenital abnormalities or stents/ drains. • Duration depends on rapidity of response to appropriate therapy. • Consider an initial dose of ceftriaxone/ertapenem or aminoglycoside at outset if urosepsis. • See "Bloodstream Infections" below.
Respiratory Tract Infections		
Bacterial sinusitis	Beta-lactams/TMP-SMX – 5 - 7 days	• Greater than 95% of cases are <u>viral</u> - use symptomatic therapy only. • Consider antibiotics after 10 days of symptoms, or if symptoms worsen after initially improving.
Community Acquired Pneumonia	Goal/minimum of 5 days	• Should achieve clinical stability for 48-72 hours before stopping antibiotics. • Immune suppressed patients, patients with underlying lung disease or those with empyema will need longer treatment durations.
Hospital and Ventilator Acquired Pneumonia (HAP/VAP)	5 - 7 days	• Immune suppressed patients, patients with collections or abscesses, empyema, or associated *S. aureus* infection will require longer treatment.
Acute Chronic Obstructive Pulmonary Disease (COPD) exacerbation	5 - 7 days	• Only for patients meeting criteria for antibiotic treatment (ie. Increase in dyspnea, sputum volume, and sputum purulence).
Intra-abdominal Infections and Inflammatory Syndromes		
Uncomplicated appendicitis	Pre-operative antibiotics only	
Gangrenous or perforated appendicitis	Pre-operative antibiotics, plus treat for an additional 24-48 hours	
Traumatic bowel perforation	No more than 24 hours post-operatively	• Operated on within 12 hours of trauma.
Gastroduodenal perforation	No more than 24 hours post-operatively	• Operated on within 24 hours.
Intraabdominal infection/abscess AFTER source control	<7 days	• Optimal source control **required.**
Intraabdominal infection/abscess WITHOUT source control	Until radiographic resolution or scarring/stability	• Recommend weekly bloodwork/CRP.
Skin Infections		
Uncomplicated non-purulent or purulent cellulitis	5 - 7 days (once afebrile)	• Severe infection or slow treatment response may warrant treatment extension.
Osteo-articular Infections		
Acute Osteomyelitis	6 weeks Post debridement: 4 to 6 weeks	• Chronic osteomyelitis without debridement down to bleeding bone requires longer therapy (possibly 12 weeks IV→PO). • Assumes there is no retained hardware.

Bloodstream Infections		
Gram negative	7 - 14 days	• Consider 7 days for uncomplicated Enterobacteriaceae bacteremia which responds to therapy (assumes source control and no associated clinical syndrome requiring longer therapy). • Source control/ruled out IA infections.
Gram positive: *S. aureus*	14 days from date of negative blood cultures (minimum)	• Almost always IV route for the course of therapy. • Use of fresh lines required. • Assumes no endocarditis, no deep focus of infection, and no indwelling devices.
Gram positive: NOT *S. aureus*	Depends on clinical response and syndrome. e.g. *Streptococcus pneumoniae*: 5 days total	• Negative blood cultures not routinely necessary
Yeast	14 days from the date of negative blood cultures (minimum)	• Need to rule out endophthalmitis • Use of fresh lines required

Approved by: Health PEI PD&T – Nov 2020 **(Last updated October 2020)**

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