



Expected Practices

Specialty: Infectious Disease and Antibiotic Stewardship Workgroups

Subject: Duration of Antibiotic Therapy for Common Infections

Date: September 14, 2016

Purpose:

To outline most effective antibiotic duration length of therapy for common infections

Target Audience:

All Outpatient and Inpatient Clinicians

Expected Practice:

Multiple clinical trials have demonstrated that shorter courses of antibiotics are as effective as longer courses for many common infections. Furthermore, shorter courses expose the body and the environment to less antibiotic selective pressure, decreasing the rate of emergence of resistant bacteria. Based on randomized controlled trials, standard antibiotic durations for infections have been established and are listed below. Clinical judgment is important to ensure that the patient being treated is appropriate for the disease category and population studied, and to monitor for relapse of infection or failure to resolve with initial therapy. Deviations from these durations of antibiotics should be explicitly clinically justified as longer courses have not been established to be more effective for typical cases, and expose the patient to increased risk of adverse events and greater risk of emergence of antibiotic resistance.

This *Expected Practice* was developed by a DHS Specialty-Primary Care Work Group to fulfill the DHS mission to ensure access to high-quality, patient-centered, and cost-effective health care. SPC Work Groups, composed of specialist and primary care provider representatives from across LA County DHS, are guided by 1) real-life practice conditions at our facilities, 2) available clinical evidence, and 3) the principle that we must provide equitable care for the entire population that LA County DHS is responsible for, not just those that appear in front of us. It is recognized that in individual situations a provider's clinical judgment may vary from this *Expected Practice*, but in such cases compelling documentation for the exception should be provided in the medical record.

Disease^(ref)	Expected Duration of Antibiotic Therapy (days)	Comment
Community Acquired Pneumonia ¹⁻³	5	Not studied for ICU/ventilated patients
Nosocomial Pneumonia ^{4,5}	7	Includes ICU/ventilated patients, some advocate for 10-14 days for <i>Pseudomonas</i> or <i>Acinetobacter</i> —no data clarify if longer courses are more effective for these pathogens.
Intra-abdominal Infection ^{6,7}	4	Antimicrobial therapy of established infection should generally be limited to 4 days after source control in patients who are hemodynamically stable. Longer durations of therapy have not been associated with improved outcome in such patients. Patients who are unstable or have difficult to achieve source control should be discussed with ID.
Acute bronchitis	≠	Routine antibiotic treatment of acute bronchitis is NOT indicated
Acute Exacerbation of Chronic Bronchitis and COPD ⁸	≤5	Reserve antibiotics for patients with an acute exacerbation <u>with</u> significant physiological compromise on top of chronic bronchitis (defined as a chronic cough that occurs on most days of the month for ≥3 months per year for ≥2 years) or for COPD for patients with physiological compromise, and worsening sputum purulence and either increased dyspnea or frequency of cough.
Acute Bacterial Sinusitis ⁹	5	98% of URIs are viral and should NOT be treated with antibiotics—consider Abx for symptoms of acute rhinosinusitis that fail to improve within ≥10 d after onset of URI, or fever 102°F (39°C), or biphasic illness with symptoms/signs of acute rhinosinusitis worsening within 10 d after initial improvement.
Cellulitis and skin abscesses ¹⁰⁻¹²	5 to 6	In conjunction with drainage of all/any abscess collection.
Complicated Urinary Tract Infection (including pyelonephritis or UTI in the presence of indwelling catheters) ¹³⁻¹⁵	5-7 (3 days may be appropriate for catheter-associated cystitis if urinary catheter removal	Appropriate for patients with anatomical abnormalities or urinary-catheter-related. Source control intervention is first priority. Removal of urinary catheter recommended.

	and rapid clinical response)	
Cystitis ¹³	1-5 days	5 days of nitrofurantoin, 3 days of TMP-SMX, 1 dose of fosfomycin, or 1 dose of IV ceftriaxone or an aminoglycoside is sufficient.
Asymptomatic Bacteriuria ¹⁴	0	DO NOT TREAT IN THE ABSENCE OF SYMPTOMS UNLESS THE PATIENT IS PREGNANT, IS A RENAL TRANSPLANT PATIENT, OR IS UNDERGOING URINARY PROCEDURAL MANIPULATION.
		Key Points:
		<ol style="list-style-type: none"> 1. Pyuria accompanying asymptomatic bacteriuria is not by itself an indication for antimicrobial treatment. 2. A positive urine culture at > 10⁵ CFU/mL identifies bacteriuria but is not an indication for treatment in the absence of symptoms.

When to submit eConsult: Acute infections generally do not warrant eConsults. If there are questions about subacute or chronic infections, or recurrent acute infections, eConsults are appropriate.

References:

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