



# 5 WAYS HOSPITALISTS CAN BE ANTIBIOTICS AWARE



## 1. Verify Penicillin Allergy

- Although 10% of the population in the United States reports a penicillin allergy, less than 1% of the population is truly penicillin allergic.<sup>1</sup> The use of alternative antibiotics in patients incorrectly labeled as penicillin allergic is associated with higher healthcare costs, increased risk for antibiotic resistance, suboptimal antibiotic therapy, and worse outcomes.<sup>1</sup>
- When possible, obtain a more detailed history of the penicillin reaction and review previously prescribed antibiotics. Refer to your facility's penicillin allergy evaluation protocol if applicable.



## 2. Use Appropriate Therapy for Uncomplicated Skin and Soft Tissue Infections

- Most community-acquired uncomplicated skin and soft tissue infections (SSTI) are caused by gram-positive bacteria (i.e. Staphylococcus and Streptococcus spp.).
- Avoid broad-spectrum, gram-negative and anaerobic agents unless clinically indicated.<sup>2</sup>



## 3. Reassess Antibiotic Therapy

- Reassessment of antibiotic therapy evaluates the continued need for and choice of antibiotics when the clinical picture is clearer and more diagnostic information is available.<sup>3</sup>
- Consider stopping and/or tailoring antibiotic therapy as appropriate.



## 4. Avoid Treatment of Asymptomatic Bacteriuria

- Patients with asymptomatic bacteriuria should not be treated with antibiotics in most cases (with the exception of pregnant women and patients undergoing certain genitourinary procedures).<sup>4</sup>
- Evaluate for the presence of signs and symptoms consistent with urinary tract infection (UTI) before ordering urine cultures and when considering treatment of positive urine cultures.



## 5. Prescribe the Shortest, Effective Duration of Antibiotic Therapy

- Guidelines for treatment duration are available for common infectious diseases such as pneumonia, UTI, and SSTI (e.g., five days for uncomplicated community-acquired pneumonia).<sup>5,6,7</sup>
- Use the shortest recommended duration of antibiotic therapy if the patient had an uncomplicated clinical course and responded appropriately to therapy. When prescribing antibiotics at discharge, consider the total number of days of inpatient antibiotic therapy.

*The scenarios and recommendations are applicable to most immunocompetent adult patients. Always assess the individual patient and use your clinical judgment. Follow your institution's treatment guidelines when applicable.*

### References:

1. Centers for Disease Control and Prevention, <https://www.cdc.gov/antibiotic-use/community/pdfs/penicillin-factsheet.pdf>
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3. CDC. Antibiotic Use in the United States, 2017: Progress and Opportunities. Atlanta, GA: US Department of Health and Human Services, CDC; 2017.
4. Nicolle LE, Gupta K, Bradley SF, et al. Clinical Practice Guideline for the Management of Asymptomatic Bacteriuria: 2019 Update by the Infectious Diseases Society of America. Clin Infect Dis. 2019;
5. Mandell LA, Wunderink RG, Anzueto A, et al. Infectious Diseases Society of America/American Thoracic Society consensus guidelines on the management of community-acquired pneumonia in adults. Clin Infect Dis. 2007;44 Suppl 2:S27-72.
6. Gupta K, Hooton TM, Naber KG, et al. International clinical practice guidelines for the treatment of acute uncomplicated cystitis and pyelonephritis in women: A 2010 update by the Infectious Diseases Society of America and the European Society for Microbiology and Infectious Diseases. Clin Infect Dis. 2011;52(5):e103-120.
7. Stevens DL, Bisno AL, Chambers HF, et al. Practice guidelines for the diagnosis and management of skin and soft tissue infections: 2014 update by the Infectious Diseases Society of America. Clin Infect Dis. 2014;59(2):e10-52.

