

Top 10 Tips from Antimicrobial Stewardship and Infection Control

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1. Get appropriate cultures. Patients should have cultures done before initiating therapy if this will not delay therapy. Antibiotics should not generally be delayed but the yield of cultures is greater if they can be obtained before antimicrobials are begun. Please make sure urine, sputum or blood cultures have been ordered and are being obtained before starting antimicrobials.

2. Use the hospital antibiograms. Hospital wide, unit specific and outpatient antibiograms are prepared each year. The data provided by these is useful when selecting empiric therapy to determine the agent most likely to be active against the suspected pathogen(s).

[TNMC Antibiograms](#)

3. Avoid empiric fluoroquinolones for Gram-negative infections (e.g. urinary tract infections, intra-abdominal infections). Resistance rates are high (>20%) in common pathogens such as *E. coli* and *Klebsiella* species. While these drugs may be used as definitive therapy when cultures show susceptibility they should generally be avoided as initial therapy.

4. Certain bacteria are never blood culture contaminants. Do not consider blood cultures positive for *Staphylococcus aureus*, Gram-negatives pathogens, or fungi to be contaminated even if only one blood culture is positive. Isolation of these pathogens in blood should always be treated.

5. Use empiric combination Gram-negative therapy only where clearly beneficial and choose the right combination agent. Only patients who are severely ill (severe sepsis/septic shock) or at high risk of isolation of a resistant pathogen (previous history of resistance) are likely to benefit from combination therapy. Use of additional antibiotics may actually be harmful so only use combination therapy where it is most likely to be beneficial.

The addition of a fluoroquinolone to broad-spectrum beta-lactams adds little additional coverage. Aminoglycosides are much more likely to be active if the organism is resistant to the beta-lactam agent.

[TNMC Gram-negative Combination Antibiogram](#)

6. Don't treat asymptomatic bacteriuria. Most patients with a positive urine culture do not require treatment. If the patient is asymptomatic (no new onset dysuria, frequency, urgency, supra-pubic pain, or fever), then treatment is NOT indicated, regardless of urine culture and urinalysis results. Exceptions where treatment would be indicated in the absence of symptoms include pregnancy and in patients about to undergo invasive urologic procedures.

7. Utilize procalcitonin in lower respiratory tract infections. Procalcitonin levels are very useful in determining whom to treat and when to discontinue therapy in respiratory tract infections. Utilize the institutional algorithms for when to initiate and discontinue antibiotics based on procalcitonin.

[TNMC Procalcitonin Guidance and Algorithms](#)

8. *Clostridium difficile* requires contact isolation for the duration of therapy – and beyond!

[TNMC C. difficile Management Algorithm](#)

9. Ensure daily chlorhexidine (CHG) bathing in hospitalized patients.

CHG bathing is being promoted as standard practice at The Nebraska Medical Center. CHG is a simple, effective strategy to decrease bloodstream infections and reduce the acquisition of VRE, MRSA and *Clostridium difficile*.

[Chlorhexidine Bathing](#)

10. It's flu season! Get your flu shot! Additionally, patients presenting with Influenza like illness should be placed in droplet precautions until influenza is ruled out. A negative rapid antigen does not rule out influenza.

[Droplet Isolation Information](#)