



American College of
Emergency Physicians®

ADVANCING EMERGENCY CARE 

POLICY STATEMENT

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Antimicrobial Stewardship

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Antimicrobial resistance and the reduction of remaining effective antimicrobial armamentarium represent a critical threat to the public health and health of patients in emergency departments throughout the United States and the world. Antimicrobial stewardship programs aim to optimize antimicrobial usage for clinical efficacy while minimizing adverse drug events, selective pressures that drive the emergence of resistance, and costs due to suboptimal antimicrobial use. The American College of Emergency Physicians (ACEP) supports and encourages the engagement of emergency physicians and emergency departments (EDs) in antimicrobial stewardship efforts at all levels.

For clinicians, engagement includes, but is not limited to, practicing the “five D’s” of antimicrobial stewardship: drug, dose, duration, de-escalation, and diagnosis. Ideally, the prescriber will select the right drug (eg, most narrow spectrum), at the right dose (eg, adjusted for patient weight, renal function, etc.), for the right duration (eg, shortest to successfully treat infection), and consider de-escalation when possible (eg, narrow spectrum based on microbiological culture results). Accurate diagnosis, the fifth “D” of stewardship, is a critical concept in antimicrobial stewardship, as it underscores the importance of avoiding antibiotics for nonresponsive conditions. As the majority of pediatric infections are viral in origin, emergency physicians treating children should be mindful of current recommendations regarding diagnosis and treatment of common infections, with an emphasis on avoiding antibiotics for nonresponsive conditions, including upper respiratory tract infections (eg, bronchitis, sinusitis), reactive airway disease, asymptomatic bacteriuria, pseudocellulitis, and viral exanthems. Patient/guardian education on when antibiotics are not indicated, and why, provide teachable moments to advance antimicrobial stewardship best practices in the ED.

For emergency physician quality champions, medical directors, and other senior leaders, engagement should begin with conducting an institutional review of current antimicrobial stewardship efforts, securing leadership commitment, and developing relevant policies, procedures, data collection, and metrics that are inclusive of all patient populations, including pediatrics. For institutions with sufficient patient volumes and resources, emergency physicians should consider use of ED-specific antibiograms, educational materials, and electronic health record support tailored to adult and pediatric patient populations.

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