

ABR-Scan Science Week 1-2

Unit for Antibiotics and Infection Control

This biweekly ABR-Scan is compiled by the Unit for Antibiotics and Infection Control at the Public Health Agency of Sweden (PHAS). It includes a summary of links to recent peer-reviewed articles mainly from a selection of 17 scientific journals, which are listed at the bottom of the document. The articles are sorted according to the following categories: surveillance, treatment and diagnosis, prevention and intervention, microbiology and other. Please note that the information and views set out in the articles included are those of the author(s) and do not necessarily reflect the official opinion of PHAS. Please send an e-mail to ABR-scan@folkhalsomyndigheten.se if you would like to subscribe, unsubscribe or submit any comments or suggestions.

Surveillance

Trends in Outpatient Antibiotic Use in 3 Health Plans. [Pediatrics](#)

Increased Risk for Invasive Group A Streptococcus Disease for Household Contacts of Scarlet Fever Cases, England, 2011–2016. [Emerging Infectious Diseases](#)

Candida auris Sternal Osteomyelitis in a Man from Kenya Visiting Australia, 2015. [Emerging Infectious Diseases](#)

Stably high azithromycin resistance and decreasing ceftriaxone susceptibility in *Neisseria gonorrhoeae* in 25 European countries, 2016. [BMC Infectious Diseases](#)

Harnessing alternative sources of antimicrobial resistance data to support surveillance in low-resource settings. [Journal of Antimicrobial Chemotherapy](#)

Antimicrobial Consumption and Susceptibility of *Neisseria gonorrhoeae*: A Global Ecological Analysis. [Frontiers in Medicine](#)

Antimicrobial consumption in five adult intensive care units: a 33-month surveillance study. [Antimicrobial Resistance and Infection Control](#)

Antibiotic use for community-acquired pneumonia in neonates and children: WHO evidence review. [Pediatrics and International Child Health](#)

Pattern and extent of off-label and unlicensed drug use in neonatal intensive care units in Iran. [BMC Pediatrics](#)

Clostridioides difficile incidence related to in-hospital cephalosporin use: a tale of two highly comparable hospitals. [Clinical Microbiology and Infection](#)

Socioeconomic disparities associated with 29 common infectious diseases in Sweden, 2005–14: an individually matched case-control study. [Lancet Infectious Diseases](#)

Antimicrobial resistance surveillance in Ethiopia: Implementation experiences and lessons learned. [African Journal of Laboratory Medicine](#)

Prevalence of *Acinetobacter baumannii* in Saudi Arabia: risk factors, antimicrobial resistance patterns and mechanisms of carbapenem resistance. [Annals of Clinical Microbiology and Antimicrobials](#)

Are methicillin-susceptible *Staphylococcus aureus* carriers protected from methicillin-resistant *Staphylococcus aureus* infections? [Clinical Microbiology and Infection](#)

Methicillin resistance in Staphylococcus aureus infections among patients colonized with methicillin-susceptible Staphylococcus aureus. [Clinical Microbiology and Infection](#)

Third-generation cephalosporin and carbapenem resistance in Streptococcus mitis/oralis. Results from a nationwide registry in the Netherlands. [Clinical Microbiology and Infection](#)

Rethinking Antimicrobial Resistance Surveillance: A Role for Lot Quality Assurance Sampling. [American Journal of Epidemiology](#)

Treatment and diagnosis

Effect of Piperacillin-Tazobactam vs Meropenem on Mortality in Gram-Negative Bloodstream Infection. [Critical Care Medicine](#)

Treating Appendicitis Without Surgery – 5-Year Follow-up From a Randomized Clinical Trial of Antibiotic Treatment. [Emergency Medicine](#)

Comparison of 3 Days Amoxicillin Versus 5 Days Co-Trimoxazole for Treatment of Fast-breathing Pneumonia by Community Health Workers in Children Aged 2–59 Months in Pakistan: A Cluster-randomized Trial. [Clinical Infectious Diseases](#)

Use of Aerosolized Antibiotics in Gram-Negative Ventilator-Associated Pneumonia in Trauma Patients. [American Surgeon](#)

Fosfomycin in severe infections due to genetically distinct pan-drug-resistant Gram-negative microorganisms: synergy with meropenem. [Journal of Antimicrobial Chemotherapy](#)

Diagnostic ability and inappropriate antibiotic prescriptions: a quasi-experimental study of primary care providers in rural China. [Journal of Antimicrobial Chemotherapy](#)

Decision-support models for empiric antibiotic selection in Gram-negative bloodstream infections. [Clinical Infectious Medicine](#)

Rethinking How Antibiotics Are Prescribed - Incorporating the 4 Moments of Antibiotic Decision Making Into Clinical Practice. [JAMA](#)

Antibiotic use in patients with abdominal injuries: guideline by the Korean Society of Acute Care Surgery. [Annals of Surgical Treatment and Research](#)

Comparing current US and European guidelines for nosocomial pneumonia. [Current Opinion in Pulmonary Medicine](#)

Time to positivity of blood cultures supports early re-evaluation of empiric broad-spectrum antimicrobial therapy. [PLoS One](#)

Early discontinuation of antibiotics for febrile neutropenia versus continuation until neutropenia resolution in people with cancer. [Cochrane Library](#)

Prevention and intervention

Developing core elements and checklist items for global hospital antimicrobial stewardship programmes: a consensus approach. [Clinical Microbiology and Infection](#)

What the WHO's List of Essential Diagnostics means for clinical microbiology laboratories and antimicrobial stewardship practice worldwide. [Clinical Microbiology and Infection](#)

Association of Screening and Treatment for Preoperative Asymptomatic Bacteriuria With Postoperative Outcomes Among US Veterans. [JAMA Surgery](#)

Patient-related determinants of antibiotic use: a systematic review. [Clinical Microbiology and Infection](#)

Cost-effectiveness analysis of a GP- and parent-directed intervention to reduce antibiotic prescribing for children with respiratory tract infections in primary care. [Journal of Antimicrobial Chemotherapy](#)

Microbiology

mcr-1 facilitated selection of high-level colistin resistant mutants in Escherichia Coli. [Clinical Microbiology and Infection](#)

Polymyxin B Etest[®] compared with gold-standard broth microdilution in carbapenem-resistant Enterobacteriaceae exhibiting a wide range of polymyxin B MICs. [Clinical Microbiology and Infection](#)

Are coagulase-negative staphylococci virulent? [Clinical Microbiology and Infection](#)

Other

Africa Centres for Disease Control and Prevention's framework for antimicrobial resistance control in Africa. [African Journal of Laboratory Medicine](#)

Pharmacodynamic modeling of β -lactam / β -lactamase inhibitor checkerboard data: illustration with aztreonam-avibactam. [Clinical Microbiology and Infection](#)

The publications included in the scan are: Antimicrobial Agents and Chemotherapy, British Medical Journal, Clinical Infectious Diseases, Clinical Microbiology and Infection, Emerging Infectious Diseases, Eurosurveillance, Infection Control & Hospital Epidemiology, Infectious Diseases, JAMA - The Journal of the American Medical Association, Journal of Antimicrobial Chemotherapy, Journal of Hospital Infection, Journal of Infectious Diseases, Lancet, Lancet Infectious Diseases, New England Journal of Medicine, Pediatrics and Scandinavian Journal of Primary Health Care. In addition, other articles from other publications can be included.