

# ABR-Scan Science Week 13-14

## 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](mailto:ABR-scan@folkhalsomyndigheten.se) if you would like to subscribe, unsubscribe or submit any comments or suggestions.*

### Surveillance

Summary and Trends of the Russian Gonococcal Antimicrobial Surveillance Programme, 2005-2016. [Journal of Clinical Microbiology](#)

Association between urinary community-acquired fluoroquinolone-resistant Escherichia coli and neighbourhood antibiotic consumption: a population-based case-control study. [Lancet Infectious Diseases](#)

Prevalence and predictors of MRSA carriage among employees in a non-outbreak setting: a cross-sectional study in an acute care hospital. [Journal of Occupational Medicine and Toxicology](#)

A snapshot of antimicrobial resistance in Mexico. Results from 47 centers from 20 states during a six-month period. [PLoS One](#)

Computer-assisted, high-frequency, hospital-wide point prevalence surveys of hospital-acquired infections in a tertiary care hospital, the Netherlands, 2013 to 2014. [Eurosurveillance](#)

Identification of Internationally Disseminated Ceftriaxone-Resistant Neisseria gonorrhoeae Strain FC428, China. [Emerging Infectious Diseases](#)

Staphylococcus capitis and NRCS-A clone: the story of an unrecognized pathogen in neonatal intensive care units. [Clinical Microbiology & Infection](#)

Prevalence of multidrug-resistant organisms in nursing homes in Belgium in 2015. [PLoS One](#)

Prevalence of nasal carriage of methicillin-resistant Staphylococcus aureus in patients at hospital admission in the Netherlands, 2010 – 2017: an observational study. [Clinical Microbiology and Infection](#)

Outbreak of Hypervirulent Multidrug-resistant Klebsiella variicola Causing High Mortality in Neonates in Bangladesh. [Clinical Infectious Diseases](#)

Dissonant views - GPs' and parents' perspectives on antibiotic prescribing for young children with respiratory tract infections. [BMC Family Practice](#)

Perceived differences between intensivists and infectious diseases consultants facing antimicrobial resistance: a global cross-sectional survey. [European Journal of Clinical Microbiology & Infectious Diseases](#)

Physicians' attitude and knowledge regarding antibiotic use and resistance in ambulatory settings. [American Journal of Infection Control](#)

The Importance of Antimicrobial Resistance Monitoring Worldwide and the Origins of SENTRY Antimicrobial Surveillance Program. [Open Forum Infectious Diseases](#)

Comparing Patient Risk Factors, Sequence Type, and Resistance Loci Identification Approaches for Predicting Antibiotic Resistance in *Escherichia coli* Bloodstream Infections. [Journal of Clinical Microbiology](#)

Increasing Multidrug Antibiotic Resistance in MRSA Infections of the Hand: A 10-Year Analysis of Risk Factors. [Hand](#)

Antibiotic prescription for febrile children in European emergency departments: a cross-sectional, observational study. [Lancet Infectious Diseases](#)

Potential for More Rational Use of Antibiotics in Hospitalized Children in a Country With Low Resistance. [Pediatric Infectious Disease Journal](#)

Estimating global trends in total and childhood antibiotic consumption, 2011-2015. [BMJ Global Health](#)

Outpatient Pediatric Antibiotic Use: a Systematic Review. [Current Infectious Disease Reports](#)

Changes in US Outpatient Antibiotic Prescriptions from 2011-2016. [Clinical Infectious Diseases](#)

A comparative analysis of prophylactic antimicrobial use in long-term care facilities in Ireland, 2013 and 2016. [Eurosurveillance](#)

Medication Use for Childhood Pneumonia at a Children's Hospital in Shanghai, China: Analysis of Pattern Mining Algorithms. [JMIR Medical Informatics](#)

Acquisition and colonization dynamics of antimicrobial-resistant bacteria during international travel: a prospective cohort study. [Clinical Microbiology and Infection](#)

Special Issue: Antimicrobial Resistance from Food Animal Production. [Annals of the New York Academy of Sciences](#)

The relevance of sink proximity to toilets on the detection of *Klebsiella pneumoniae* carbapenemase inside sink drains. [American Journal of Infection Control](#)

## Treatment and diagnosis

Increased adherence to treatment guidelines in patients with urinary tract infection in primary care: A retrospective study. [PLoS One](#)

Clinical Practice Guideline for the Management of Asymptomatic Bacteriuria: 2019 Update by the Infectious Diseases Society of America. [Clinical Infectious Diseases](#)

Choice of Empirical Antibiotic Therapy and Adverse Outcomes in Older Adults With Suspected Urinary Tract Infection: Cohort Study. [Open Forum Infectious Diseases](#)

Comparison of Intravenous and Oral Definitive Antibiotic Regimens in Hospitalized Patients with Gram-Negative Bacteremia from a Urinary Tract Infection. [Journal of Global Antimicrobial Resistance](#)

A short course of antibiotic treatment is safe after catheter withdrawal in catheter-related bloodstream infections due to coagulase-negative staphylococci. [European Journal of Clinical Microbiology & Infectious Diseases](#)

A Therapeutic Strategy for All Pneumonia Patients: A 3-Year Prospective Multicenter Cohort Study Using Risk Factors for Multidrug-resistant Pathogens to Select Initial Empiric Therapy. [Clinical Infectious Diseases](#)

Open-Label Randomized Trial of Early Clinical Outcomes of Ceftaroline Fosamil Versus Vancomycin for the Treatment of Acute Bacterial Skin and Skin Structure Infections at Risk of Methicillin-Resistant *Staphylococcus aureus*. [Infectious Diseases Therapy](#)

A randomised controlled trial of matrix-assisted laser desorption ionization-time of flight mass spectrometry (MALDITOF-MS) versus conventional microbiological methods for identifying pathogens: Impact on optimal antimicrobial therapy of invasive bacterial and fungal infections in Vietnam. [Journal of Infection](#)

Carbapenem-resistant *Acinetobacter baumannii*: in pursuit of an effective treatment. [Clinical Microbiology and Infection](#)

Antibiotic Prophylaxis for Spontaneous Bacterial Peritonitis. [American Journal of Gastroenterology](#)

Economic Burden of Home Antimicrobial Therapy: OPAT Versus Oral Therapy. [Pediatrics](#)

Heterogeneity in the treatment of bloodstream infections identified from antibiotic exposure mapping. [Pharmacoepidemiology & Drug Safety](#)

A Breath of Fresh Air in the Fog of Antimicrobial Resistance: Inhaled Polymyxins for Gram-Negative Pneumonia. [Antibiotics](#)

Antibiotic Therapy for *Pseudomonas aeruginosa* Bloodstream Infections: How Long is Long Enough? [Clinical Infectious Diseases](#)

The 2018 Lebanese Society of Infectious Diseases and Clinical Microbiology Guidelines for the use of antimicrobial therapy in complicated intra-abdominal infections in the era of antimicrobial resistance. [BMC Infectious Diseases](#)

Antibacterial Envelope to Prevent Cardiac Implantable Device Infection. [NEJM](#)

Impact of Antibiotic Therapy in the Microbiological Yield of Healthcare-Associated Ventilator-Associated Pneumonia and Meningitis. [Open Forum Infectious Diseases](#)

## Prevention and intervention

Quality Metrics for Antimicrobial Stewardship Programs. [Pediatrics](#)

Infectious Diseases Specialty Intervention Is Associated With Better Outcomes Among Privately Insured Individuals Receiving Outpatient Parenteral Antimicrobial Therapy. [Clinical Infectious Diseases](#)

Antimicrobial resistance patterns in urinary *E. coli* isolates after a change in a single center's guidelines for uncomplicated cystitis in ambulatory settings. [Infection Control & Hospital Epidemiology](#)

Threatened efficiency not autonomy: Prescriber perceptions of an established pediatric antimicrobial stewardship program. [Infection Control & Hospital Epidemiology](#)

An environmental cleaning bundle and health-care-associated infections in hospitals (REACH): a multicentre, randomised trial. [Lancet Infectious Diseases](#)

Reducing unnecessary urine culturing and antibiotic overprescribing in long-term care: a before-and-after analysis. [CMAJ Open](#)

Optimising antibiotic prescribing: Collective approaches to managing a common-pool resource. [Clinical Microbiology and Infection](#)

Microbiology Investigation Criteria for Reporting Objectively (MICRO): a framework for the reporting and interpretation of clinical microbiology data. [BMC Medicine](#)

**Evaluating the impact of the ICNET® clinical decision support system for antimicrobial stewardship.** [Antimicrobial Resistance & Infection Control](#)

**Tackling the outcome bias related to the effectiveness of antibiotics against the common cold: results of a randomized controlled trial applying the Solomon four-group design.** [Translational Behavioral Medicine](#)

**Electronically delivered interventions to reduce antibiotic prescribing for respiratory infections in primary care: cluster RCT using electronic health records and cohort study.** [Health Technology Assessment](#)

**Successful Implementation of an Antibiotic Stewardship Program in an Academic Dental Practice.** [Open Forum Infectious Diseases](#)

## Microbiology

**Genomic characterization of a KPC-23-producing *Klebsiella pneumoniae* ST258 clinical isolate resistant to ceftazidime-avibactam.** [Clinical Microbiology and Infection](#)

**Impact of CLSI and EUCAST breakpoint discrepancies on reporting of antimicrobial susceptibility and AMR surveillance.** [Clinical Microbiology and Infection](#)

**Ten years of external quality assessment (EQA) of *Neisseria gonorrhoeae* antimicrobial susceptibility testing in Europe elucidate high reliability of data.** [BMC Infectious Diseases](#)

## Other

**The Slow-Motion Catastrophe of Antimicrobial Resistance and Practical Interventions for All Prescribers.** [Mayo Clinic Proceedings](#)

*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.*