

# ABR-Scan Science Week 15-16

## 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

Antibiotic Prescribing During Pediatric Direct-to-Consumer Telemedicine Visits. [Pediatrics](#)

Public health surveillance of multidrug-resistant clones of *Neisseria gonorrhoeae* in Europe: a genomic survey. [Lancet Infectious Diseases](#)

Systematic review and survey of *Neisseria gonorrhoeae* ceftriaxone and azithromycin susceptibility data in the Asia Pacific, 2011 to 2016. [PLoS One](#)

Population-level antimicrobial consumption is associated with decreased antimicrobial susceptibility in *Neisseria gonorrhoeae* in 24 European countries: an ecological analysis. [Journal of Infectious Diseases](#)

The first year of the global Enhanced Gonococcal Antimicrobial Surveillance Programme (EGASP) in Bangkok, Thailand, 2015-2016. [PLoS One](#)

Age-Dependent Increase in Incidence of *Staphylococcus aureus* Bacteremia, Denmark, 2008–2015. [Emerging Infectious Diseases](#)

Changing epidemiology of methicillin-resistant *Staphylococcus aureus* in 42 hospitals in the Dutch–German border region, 2012 to 2016: results of the search-and-follow-policy. [Eurosurveillance](#)

Detection of colistin resistance *mcr-1* gene in *Salmonella enterica* serovar Rissen isolated from mussels, Spain, 2012 to 2016. [Eurosurveillance](#)

Automated data mining of the electronic health record for investigation of healthcare-associated outbreaks. [Infection Control & Hospital Epidemiology](#)

Health and economic burden of antimicrobial-resistant infections in Australian hospitals: a population-based model. [Infection Control & Hospital Epidemiology](#)

The prevalence of antiseptic tolerance genes among staphylococci and enterococci in a pediatric population. [Infection Control & Hospital Epidemiology](#)

Evaluation of uncomplicated acute respiratory tract infection management in veterans: A national utilization review. [Infection Control & Hospital Epidemiology](#)

A Point Prevalence Study of Antimicrobial Use and Practice Among Nursing Homes in Singapore. [Drugs & Aging](#)

'LMICs as reservoirs of AMR': a comparative analysis of policy discourse on antimicrobial resistance with reference to Pakistan. [Health Policy and Planning](#)

The burden of colonization and infection by carbapenemase-producing Enterobacteriaceae in the neuro-rehabilitation setting: a prospective six-year experience. [Infection Control & Hospital Epidemiology](#)

Factors affecting the geographic variability of antibiotic-resistant healthcare-associated infections in the United States using the CDC Antibiotic Resistance Patient Safety Atlas. [Infection Control & Hospital Epidemiology](#)

Antibiotic prescription among outpatients in a prefecture of Japan, 2012–2013: a retrospective claims database study. [BMJ Open](#)

Molecular Epidemiology and Risk Factors of Ventilator-Associated Pneumonia Infection Caused by Carbapenem-Resistant Enterobacteriaceae. [Frontiers in Pharmacology](#)

Shifting trends and age distribution of ESKAPEc resistance in bloodstream infection, Southwest China, 2012–2017. [Antimicrobial Resistance & Infection Control](#)

Performance of an Easy and Simple New Scoring Model in Predicting Multidrug-Resistant Enterobacteriaceae in Community-Acquired Urinary Tract Infections. [Open Forum Infectious Diseases](#)

Estimation of multidrug resistance variability in the National Antimicrobial Monitoring System. [Preventive Veterinary Medicine](#)

Evidence of *Klebsiella pneumoniae* sharing between healthy companion animals and co-habiting humans. [Journal of Clinical Microbiology](#)

## Treatment and diagnosis

Omadacycline for Community-Acquired Bacterial Pneumonia. [NEJM](#)

Defining the Breakpoint Duration of *Staphylococcus aureus* Bacteremia Predictive of Poor Outcomes. [Clinical Infectious Diseases](#)

Optimizing dosing of nitrofurantoin from a PK/PD point of view: What do we need to know? [Drug Resistance Updates](#)

The influence of age on the clinical efficacy of tigecycline in severely ill patients. [Journal of Global Antimicrobial Resistance](#)

Are antibiotics a risk factor for the development of necrotizing enterocolitis—case-control retrospective study. [European Journal of Pediatrics](#)

‘Warning: allergic to penicillin’: association between penicillin allergy status in 2.3 million NHS general practice electronic health records, antibiotic prescribing and health outcomes. [Journal of Antimicrobial Chemotherapy](#)

Does the Beta-Lactam Matter? Nafcillin versus Cefazolin for Methicillin-Susceptible *Staphylococcus aureus* Bloodstream Infections. [Chemotherapy](#)

Procalcitonin-Guided Treatment on Duration of Antibiotic Therapy and Cost in Septic Patients (PRODA): a Multi-Center Randomized Controlled Trial. [Journal of Korean Medical Science](#)

European Consensus Guidelines on the Management of Respiratory Distress Syndrome – 2019 Update. [Neonatology](#)

Systemic antibiotic treatment of chronic osteomyelitis in adults. [European Review for Medical and Pharmacological Sciences](#)

The direct and indirect effects of vancomycin-resistant enterococci colonization in liver transplant candidates and recipients. [Expert Review of Anti-infective Therapy](#)

**Diabetic foot infections: a comprehensive overview.** [European Review for Medical and Pharmacological Sciences](#)

**Benefits and Adverse Events Associated with Extended Antibiotic Use in Total Knee Arthroplasty Periprosthetic Joint Infection.** [Clinical Infectious Diseases](#)

**Nomogram based on actual body weight for estimation of vancomycin maintenance dose in infants.** [Infectious Diseases](#)

**Monoclonal antibody-based therapies for bacterial infections.** [Current Opinion in Infectious Diseases](#)

**Electrofulguration in the advanced management of antibiotic-refractory recurrent urinary tract infections in women.** [International Journal of Urology](#)

## Prevention and intervention

**Tackling Challenges Associated with Antibiotic Resistance: Social, Economic and Policy Perspectives.** [Antibiotics](#)

**Antiseptic efficacies of waterless hand rub, chlorhexidine scrub, and povidone-iodine scrub in surgical settings: a meta-analysis of randomized controlled trials.** [Journal of Hospital Infection](#)

**The method used to dry washed hands affects the number and type of transient and residential bacteria remaining on the skin.** [Journal of Hospital Infection](#)

**Evaluation of educational content of YouTube videos focused on hand hygiene: the need for professional communication.** [Journal of Hospital Infection](#)

**Bacterial load and pathogenic species on healthcare personnel attire: implications of alcohol hand-rub use, profession, and time of duty.** [Journal of Hospital Infection](#)

**Implementation of the Core Elements of Antibiotic Stewardship in Nursing Homes Enrolled in the National Healthcare Safety Network.** [Clinical Infectious Diseases](#)

**Prospective audit and feedback on antibiotic use in neonatal intensive care: a retrospective cohort study.** [BMC Pediatrics](#)

**Clinical and Economic Outcomes of Penicillin Skin Testing as an Antimicrobial Stewardship Initiative in a Community Health System.** [Open Forum Infectious Diseases](#)

**Impact of an Unsolicited, Standardized Form-Based Antimicrobial Stewardship Intervention to Improve Guideline Adherence in the Management of *Staphylococcus aureus* Bacteremia.** [Open Forum Infectious Diseases](#)

**Shedding of methicillin-resistant *Staphylococcus aureus* by colonized patients during procedures and patient care activities.** [Infection Control & Hospital Epidemiology](#)

**Droplet aerosol dissemination of carbapenem-resistant *Acinetobacter baumannii* surrounding ventilated patients.** [Infection Control & Hospital Epidemiology](#)

**A strategy for tackling antimicrobial resistance: It's more than a prescribing problem.** [Journal of Infection Prevention](#)

## Microbiology

**Whole genome sequencing identifies bacterial factors affecting transmission of multidrug-resistant tuberculosis in a high-prevalence setting.** [Scientific Reports](#)

**Impact of EUCAST ceftaroline breakpoint change on the susceptibility of methicillin-resistant *Staphylococcus aureus* isolates collected from patients with complicated skin and soft tissue infections.** [Clinical Microbiology and Infection](#)

## Other

**The challenge of antimicrobial resistance: What economics can contribute.** [Science](#)

**Definitions and guidelines for research on antibiotic persistence.** [Nature Reviews Microbiology](#)

***Clostridium difficile* infection: review.** [European Journal of Clinical Microbiology & Infectious Disease](#)

**Antimicrobial resistance and prescribing for acute respiratory tract infections; where are we now?** [Irish Journal of Medical Science](#)

*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.*