

# ABR-Scan Science Week 26-33

## 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

Global access to antibiotics without prescription in community pharmacies: A systematic review and meta-analysis. [Journal of Infection](#)

Age-related decline in antibiotic prescribing for uncomplicated respiratory tract infections in primary care in England following the introduction of a national financial incentive (the Quality Premium) for health commissioners to reduce use of antibiotics in the community: an interrupted time series analysis. [Journal of Antimicrobial Chemotherapy](#)

Comparison of antibiotic prescribing and antimicrobial resistance in urinary tract infections at the municipal level among women in two Nordic regions. [Journal of Antimicrobial Chemotherapy](#)

Comparison of Antibiotic Prescribing in Retail Clinics, Urgent Care Centers, Emergency Departments, and Traditional Ambulatory Care Settings in the United States. [JAMA Internal Medicine](#)

Temporal association between antibiotic use and resistance in *Klebsiella pneumoniae* at a tertiary care hospital. [Antimicrobial Resistance and Infection Control](#)

Carbapenem-Resistant Hypervirulent *Klebsiella pneumoniae* of Sequence Type 36. [Antimicrobial Agents and Chemotherapy](#)

Epidemiology and resistance phenotypes of carbapenemase-producing *Klebsiella pneumoniae* in Greece, 2014 to 2016. [Eurosurveillance](#)

Novel Insights into Selection for Antibiotic Resistance in Complex Microbial Communities. [mBio](#)

Antibiotic use in people and pigs: a One Health survey of rural residents' knowledge, attitudes and practices in Shandong province, China. [Journal of Antimicrobial Chemotherapy](#)

Prevalence of antibiotic resistance in *Helicobacter pylori*: a systematic review and meta-analysis in World Health Organization regions. [Gastroenterology](#)

Healthcare-associated pneumonia in acute care hospitals in European Union/European Economic Area countries: an analysis of data from a point prevalence survey, 2011 to 2012. [Eurosurveillance](#)

Clonal Emergence of Invasive Multidrug-Resistant *Staphylococcus epidermidis* Deconvoluted via a Combination of Whole-Genome Sequencing and Microbiome Analyses. [Clinical Infectious Diseases](#)

Regional Spread of an Outbreak of Carbapenem-Resistant *Enterobacteriaceae* Through an Ego Network of Healthcare Facilities. [Clinical Infectious Diseases](#)

Sharing more than friendship – transmission of NDM-5 ST167 and CTX-M-9 ST69 *Escherichia coli* between dogs and humans in a family, Finland, 2015. [Eurosurveillance](#)

Risk factors for colistin-resistant Enterobacteriaceae in a low-endemicity setting for carbapenem resistance – a matched case–control study. [Eurosurveillance](#)

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

Gonorrhoea treatment failure caused by a *Neisseria gonorrhoeae* strain with combined ceftriaxone and high-level azithromycin resistance, England, February 2018. [Eurosurveillance](#)

Trends in *Neisseria gonorrhoeae* Antimicrobial Resistance over a Ten-Year Surveillance Period, Johannesburg, South Africa, 2008–2017. [Antibiotics](#)

Patterns in the epidemic of *Escherichia coli* bloodstream infection in Oxfordshire. [Lancet Infectious Diseases](#)

Trends over time in *Escherichia coli* bloodstream infections, urinary tract infections, and antibiotic susceptibilities in Oxfordshire, UK, 1998–2016: a study of electronic health records. [Lancet Infectious Diseases](#)

Outbreak of vancomycin-resistant *Enterococcus faecium* clone ST796, Switzerland, December 2017 to April 2018. [Eurosurveillance](#)

The changing epidemiology of pneumococcal diseases. [Lancet Infectious Diseases](#)

Incidence of paediatric pneumococcal meningitis and emergence of new serotypes: a time-series analysis of a 16-year French national survey. [Lancet Infectious Diseases](#)

Extremely and pandrug-resistant bacteria extra-deaths: myth or reality? [European Journal of Clinical Microbiology & Infectious Diseases](#)

Alarming rates of antimicrobial resistance and fungal sepsis in outborn neonates in North India. [PLoS One](#)

Spread of mcr-1–Driven Colistin Resistance on Hospital Surfaces, Italy. [Emerging Infectious Diseases](#)

Poverty and Community-Acquired Antimicrobial Resistance with Extended-Spectrum  $\beta$ -Lactamase–Producing Organisms, Hyderabad, India. [Emerging Infectious Diseases](#)

Emergence of azithromycin resistance mediated by the *mph(A)* gene in *Salmonella* Typhimurium clinical isolates in Latin America. [Journal of Global Antimicrobial Resistance](#)

## Treatment and diagnosis

Gepotidacin for the Treatment of Uncomplicated Urogenital Gonorrhea: A Phase 2, Randomized, Dose-Ranging, Single-Oral Dose Evaluation. [Clinical Infectious Diseases](#)

The Effect of Antibiotic Selection Pressure on the Nasopharyngeal Macrolide Resistome: A Cluster-randomized Trial. [Clinical Infectious Diseases](#)

Testing for gonorrhoea should routinely include the pharynx. [Lancet Infectious Diseases](#)

Risk of meticillin resistant *Staphylococcus aureus* and *Clostridium difficile* in patients with a documented penicillin allergy: population based matched cohort study. [BMJ](#)

Setting the baseline to fight Gram-negative bacteraemia: the necessity of epidemiological insights. [Infectious Diseases](#)

Single-dose oral ciprofloxacin prophylaxis as a response to a meningococcal meningitis epidemic in the African meningitis belt: A 3-arm, open-label, cluster-randomized trial. [PLoS Medicine](#)

Late onset sepsis: comparison between coagulase-negative staphylococci and other bacteria in the neonatal intensive care unit. [Infectious Diseases](#)

## Prevention and intervention

Increasing tolerance of hospital *Enterococcus faecium* to handwash alcohols. [Science Translational Medicine](#)

Antimicrobial consumption and impact of Antimicrobial Stewardship programmes in long-term care facilities. [Clinical Microbiology and Infection](#)

Driving sustainable change in antimicrobial prescribing practice: how can social and behavioural sciences help? [Journal of Antimicrobial Chemotherapy](#)

Impact of Implementing Antibiotic Stewardship Programs in 15 Small Hospitals: A Cluster-Randomized Intervention. [Clinical Infectious Diseases](#)

Effectiveness of targeted enhanced terminal room disinfection on hospital-wide acquisition and infection with multidrug-resistant organisms and *Clostridium difficile*: a secondary analysis of a multicentre cluster randomised controlled trial with crossover design (BETR Disinfection). [Lancet Infectious Diseases](#)

Variability in contact precautions to control the nosocomial spread of multi-drug resistant organisms in the endemic setting: a multinational cross-sectional survey. [BMC Antimicrobial Resistance & Infection Control](#)

Clinical bacteriology in low-resource settings: today's solutions. [Lancet Infectious Diseases](#)

## Microbiology

Variation of MIC measurements: the contribution of strain and laboratory variability to measurement precision. [Journal of Antimicrobial Chemotherapy](#)

Genetic characterisation of *Neisseria gonorrhoeae* resistant to both ceftriaxone and azithromycin. [Lancet Infectious Diseases](#)

## Other

Ethics of Infection Control Measures for Carriers of Antimicrobial Drug-Resistant Organisms. [Emerging Infectious Diseases](#)

The 2018 Garrod Lecture: Preparing for the Black Swans of resistance. [Journal of Antimicrobial Chemotherapy](#)

The 2017 Garrod Lecture: Genes, guts and globalization. [Journal of Antimicrobial Chemotherapy](#)

Healthcare resource use and attributable cost of *Clostridium difficile* infection: a micro-costing analysis comparing first and recurrent episodes. [Journal of Antimicrobial Chemotherapy](#)

Reply to Abat et al.: Improved policies necessary to ensure an effective future for antibiotics. [PNAS](#)

Legal framework of antimicrobial stewardship in hospitals (LEASH): a European Society of Clinical Microbiology and Infectious Diseases (ESCMID) cross-sectional international survey. [Journal of Antimicrobial Agents](#).

The drugs don't work: WHO's role in advancing new antibiotics. [Lancet](#)

Telling the truth about antibiotics: benefits, harms and moral duty in prescribing for children in primary care. [Journal of Antimicrobial Chemotherapy](#)

*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.*