



## Epidemiology of Acquired AmpC Type $\beta$ -Lactamases in Enterobacteriaceae from a One Health Perspective

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### Message from the Guest Editors

Dear Colleagues,

Resistance to third-generation cephalosporins amongst Enterobacteriaceae is endemic in many parts of the world, and molecular epidemiology in different settings is very well characterized in what concerns the production of extended-spectrum beta-lactamases (ESBLs). However, the contribution of acquired AmpC beta-lactamases is probably underestimated due to constraints in routine laboratory detection, and the absence of comprehensive studies at a wide inter- and intraspecies population levels addressing the interplay between different ecological niches (humans, animals, and the environment). The focus of this Issue is the occurrence and molecular epidemiology of bacterial species carrying acquired AmpC beta-lactamases within and between different hosts and environments. Review and research papers on the detection and treatment of infections in a clinical setting, whole-genome-based studies on population and mobile genetic elements encoding acquired AmpC beta-lactamases, or risk assessment of antibiotic resistance transmission are also encouraged.

**Keywords:** antibiotic resistance; acquired ampc beta-lactamases; surveillance; molecular epidemiology; one health





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## Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery, use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supra-governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciplines are all key. *Antibiotics* is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

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