Review examines the extent of antimicrobial resistance in bacteria from horses

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Bacterial resistance to antimicrobial agents is a significant problem for both human and veterinary medicine, but little research has been done on the prevalence or mechanisms of resistance in horses and other companion animals, and how such resistance might impact human health.

A new review in the *Equine Veterinary Journal* reveals that antimicrobial resistance is prevalent in bacteria from horses, particularly E. coli. Also, while methicillin-resistant S. aureus (MRSA) can be common in hospitalized horses, it is less frequently present in the general equine population. The emergence of multidrug resistance in many other bacterial species, however, represents a huge challenge for society.

"Whilst we are starting to see the emergence of research looking at some resistant bacteria from horses such as MRSA and resistant E. coli, there are still many other significant bacteria for which we have little information on how much of a problem exists," said Dr. Thomas Maddox, lead author of the review. "Perhaps more importantly, we have only a limited knowledge of what factors contribute to drive antimicrobial resistance, particularly in species such as horses; a better understanding of this is vital if we are to make useful attempts to limit the extent of the problem."

More information: T. W. Maddox et al. Antimicrobial resistance in bacteria from horses: Epidemiology of antimicrobial resistance, *Equine Veterinary Journal* (2015). DOI: 10.1111/evj.12471

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