

Developing Antimicrobial Use Guidelines For Treating Horses In Australia

Antimicrobial resistance (AMR) is a problem for equine practitioners in Australia but guidelines for antimicrobial use are lacking. Antimicrobial use guidelines have been developed by the British Equine Veterinary Association but are not fit for purpose in Australia.

A survey of Australian Veterinarians treating horses was conducted to understand the range of antimicrobial use. Antimicrobial use for reproductive and dental disorders, and non-bactericidal effects were investigated as well as compounding practices. A comprehensive literature review was undertaken to develop evidence-based guidelines for antimicrobial use for surgical prophylaxis, cardiovascular, respiratory, dentistry, gastrointestinal, neonatal, urinary, musculoskeletal, ophthalmological, dermatological and reproductive diseases as well as for local and regional antimicrobial use and for immunisation. Where evidence was insufficient, subject matter expert opinion was utilised.

Responses were received from 134 veterinarians working with horses. Most respondents reported using common equine antimicrobials (trimethoprim sulphamide, penicillin, gentamicin). Use of high importance agents were reported however, including some not registered for use in horses. Compounding of antimicrobials was common (70% of respondents). Antimicrobials were also reported to be used for non-bactericidal effects. Guidelines were created for 75 conditions. Fourteen subject matter experts from Australia contributed to guideline development.

Antimicrobial guidelines may assist in aligning practice and reducing inappropriate antimicrobial use in horses. Future research should focus on investigating the impact of the guidelines.