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ANTIMICROBIAL DRUG USE IN HORSES IN THE NETHERLANDS: 2012-2014

Introduction

Antimicrobial resistance is recognized as an important problem in veterinary as well as human medicine. Prudent use of antimicrobials therefore is necessary. The aim of this study was to gain insight in the use of antimicrobial drugs in horses in the Netherlands.

Material and methods

Dutch veterinary practices providing first opinion care for horses were requested to provide information on their antimicrobial drug purchases over the years 2012, 2013 and 2014 and on the number of horses that was seen at least once by a veterinarian in this 3-year period. Based on these data the mean number of days a horse in a certain practice was treated with antimicrobials in a certain year, the Defined Daily Dose Animal (DDDADAP), was calculated.

Results

Twenty-four practices treating a total number of 70.665 unique horses over the years (representing $\pm 15\%$ of all horses in the Netherlands) were included. The mean number of DDDADAP decreased with 24% over the years (DDDA2012 0.735; DDDA2013 0.547; DDDA2014 0.562). The number of DDDADAP varied between practices from 0.168 to 1.190 in the years of the study. The use of third choice antimicrobials decreased by 68%. In 2014 85.1% of the used antimicrobial drugs were first choice drugs.

Conclusions

The use of antimicrobial drugs in horses in the Netherlands is low (DDDAhorses 0.562 in 2014) compared to other animals (DDDA_{dairy cows} 2.3; DDDA_{companion animals} 2.6) and humans (DDDhumans 5.0). It can be concluded that a horse in the Netherlands receives antimicrobial treatment for the duration of 5.62 days once every ten years. The reduction in use of antimicrobial drugs in horses (especially third-choice antimicrobials) is a positive development. This may be the successful result of strict regulations regarding the use of antimicrobials and the emphasis on this topic in training of equine veterinarians in the Netherlands.