



MARIE SJÖLUND



IDA C LINDELL



KERSTIN ANNÉR



ELIN KARLSSON



MARIA LINDBERG

Comparing antibiotic usage data for Swedish pig herds using European and national defined course doses

Marie Sjölund¹, Ida Clemensson Lindell², Kerstin Annér², Elin Karlsson² and Maria Lindberg²

¹National Veterinary Institute and ²Farm & Animal Health; Uppsala, Sweden

OBJECTIVE

Quantification of antibiotic use is dependant on the units used. The aim of this study was to compare the outcome when applying suggested national defined course doses for Sweden (DCD_{se}) to DCD_{vet} defined by the European Surveillance of Veterinary Antimicrobial Consumption (ESVAC) project on herd level usage data.

CONCLUSION

Quantifying antibiotic use with either proposed national DCD_{se} or corresponding DCD_{vet} resulted in apparent differences. However, a reduction in antibiotic use was observed for both sucklers and sows over the two years irrespective of unit used. Therefore, both DCD_{vet} and DCD_{se} can be used to follow trends over years although perhaps not reflecting the actual number of treated pigs.

RESULTS

Results are shown in box-plots below.

Medians are indicated by horizontal bars and means by x.

METHODS

- DCD_{se} based on the highest authorized daily dose and the longest treatment period according to the national Summary of Products Characteristics for each active substance (AS) had previously been defined for all products containing antibiotics approved for use in pigs in Sweden during 2016 and 2017, including those sold with special license.
- Antibiotic usage data for 2016 and 2017 from treatment records from 47 and 52 breeding herds, respectively, affiliated with the farm health advisory company Farm & Animal Health were used for the calculations.
- The number of DCD_{vet} and DCD_{se} per year were calculated per product based on the amount of AS and standardized weights (4, 12, 220 kg for sucklers, weaner and sows respectively).
- The number of DCD_{vet} and DCD_{se} per pig or farrowing per herd and year were calculated based on total numbers of DCD_{vet} and DCD_{se} and number of animals or farrowings.

