Bundesministerium
für Ernährung
und Landwirtschaft

Report of the Federal Ministry of Food and Agriculture on the evaluation of the antimicrobial minimisation concept of the 16th AMG amendment

Short summary

The German Antimicrobial Resistance Strategy DART was approved in 2008 and has been continued in the form of its successor strategy DART 2020 since 2015. One of the main measures of DART in the veterinary field is the establishment of an antimicrobial minimisation concept for farms keeping fattening calf, beef cattle, fattening piglets, fattening pigs, broilers and fattening turkeys, introduced with the 16th AMG amendment coming into force as of April 1st 2014.

It obliges the concerned livestock breeders to report semi-annually their stock numbers and their antimicrobial usage. Should the resulting "operational treatment frequency" exceed national benchmarks, at a first level "K1" the livestock breeder has to assess reasons for the elevated usage and options for reducing it in collaboration with a veterinarian. If exceeding "K2", he has to present a written plan of measures for antimicrobial usage reduction to the competent authority.

The evaluation of the effectiveness of the antimicrobial minimisation concept is required by law. In this context, data collected by the states' authorities could be centrally analysed for the first time.

The goal of reducing usage of veterinary antimicrobials was reached in all six animal categories. The amount of antimicrobials supplied by pharmaceutical companies and wholesalers to veterinarians was reduced by 57 % between 2011 and 2017. In the period 2014 to 2017, this reduction was distinctly more important compared to the preceding period. Antimicrobial usage as reported by livestock breeders was reduced by 94 t (equalling 31,6 %) in the period of the second half-year 2014 to the second half-year 2017. In parallel, semi-annual operational treatment frequencies decreased significantly. The most important reductions could be achieved for fattening piglets and fattening pigs.

Positive effects of reduced antimicrobial usage on development of the bacterial resistance situation became apparent. Bacteria of all concerned animal categories showed a general trend towards increased percentages of sensitive isolates. The spectrum of classes of antimicrobials used remained constant throughout the observation period, without showing shifts in usage towards antimicrobial classes considered critical to public health.

The tools created by legislation **enable public authorities to fulfil their duties executing the 16th AMG amendment**. For involved stakeholders from authorities, veterinary practice and breeding farms, implementation is a considerable effort. A holistic approach towards improvement of animal health was mentioned by all stakeholders as a precondition for potential further reductions of antimicrobial usage.