

Utrecht, September 14, 2018

Your reference: -  
Our reference: 005.2018/HS

Re: SDa report *Usage of Antibiotics in Agricultural Livestock in the Netherlands in 2017 - Trends and benchmarking of livestock farms and veterinarians*

Dear Sir or Madam,

The Netherlands Veterinary Medicines Institute (SDa) was established to monitor, report on and benchmark the amounts of antibiotics used in the Dutch livestock sector, in order to promote prudent usage of antibiotics. Its ultimate aim is to control the emergence and spread of antimicrobial resistance. In light of this objective, it is with great pleasure that the SDa presents this year's report: *Usage of Antibiotics in Agricultural Livestock in the Netherlands in 2017*. This report provides insight into the amounts of antibiotics used in the Dutch veal, poultry, cattle, pig and rabbit farming sectors in 2017.

In 2017, antibiotic use in terms of defined daily doses animal continued to decline in the turkey farming sector (by 23.7%), broiler farming sector (by 7.8%), veal farming sector (by 3.6%) and pig farming sector (by 1.9%). The SDa expert panel did, however, observe a modest (2.2%) increase for the cattle farming sector. According to the 2017 data, third-choice antibiotics, and fluoroquinolones and third- and fourth-generation cephalosporins in particular, were once again used very sparingly in the monitored livestock sectors.

The overall number of kilograms of antibiotics sold, including both antibiotics prescribed for animals in monitored livestock sectors (rabbits, cattle, pigs, veal calves and poultry) and antibiotics prescribed for animals in unmonitored sectors, did increase slightly compared with the 2016 level. According to the sales figures for antibiotics, a 63.4% reduction has been achieved over the 2009-2017 period.

Shortly after the initial data on the amounts of antibiotics used at Dutch livestock farms had been collected and analyzed, the SDa expert panel decided on the benchmarking approach and associated benchmark thresholds to be used for the various types of farms/production categories within the livestock sectors. In light of the observed usage pattern developments

and usage level reductions, the SDa expert panel considers it wise to revise its benchmarking method and the benchmark thresholds.

The SDa expert panel's detailed analyses of available usage data indicate that several livestock sectors or types of farms/production categories have seen the emergence of favorable usage patterns that can be deemed to reflect acceptable use of antibiotics. The term "acceptable" is used since animal husbandry will always involve occasional administration of antibiotics. After all, infected livestock should be able to receive treatment.

For livestock sectors or types of farms/production categories with such favorable usage patterns, the SDa expert panel has defined so-called benchmark thresholds representing acceptable use. These benchmark thresholds represent an acceptable usage level for the livestock sector or type of farm/production category concerned. For livestock sectors or types of farms/production categories without these favorable usage patterns, the SDa expert panel has defined so-called provisional benchmark thresholds. These livestock sectors or subsectors still have some way to go with regard to the amounts of antibiotics used. In addition to the introduction of provisional benchmark thresholds and benchmark thresholds representing acceptable use, the SDa expert panel has opted for the application of just a single benchmark threshold in its new benchmarking approach. As a result, the new benchmarking method includes just two benchmark categories instead of the original target, signaling and action zones. Consequently, all livestock farms with usage levels exceeding the new benchmark threshold are required to take action in order to reach a usage level that is deemed to be acceptable for the livestock sector or type of farm/production category concerned.

For the cattle farming sector, the broiler farming sector and two of the pig farming sector's production categories, the SDa expert panel has already been able to determine benchmark thresholds representing acceptable use. Rosé veal fattening farms also allow for the application of a benchmark threshold representing acceptable use. The other types of veal farms and the turkey farming sector will be benchmarked using provisional benchmark thresholds.

When the expert panel was revising its benchmarking method, the Ministry of Agriculture, Nature and Food Quality together with the veal, poultry and pig farming sectors had studies performed to identify so-called critical success factors that contribute to low antibiotic usage levels at veal, poultry and pig farms. The SDa expert panel compared its own findings with the results of these critical success factor studies to check for any discrepancies. The critical success factor study results might help veterinarians and livestock farmers find ways to further reduce the amounts of antibiotics used. According to the SDa expert panel, attempts to further reduce livestock sectors'  $DDDA_{NAT}$  values should be focused primarily on livestock farms with structurally high usage levels, as they are particularly likely to facilitate the development of antibiotic resistance. Results of a study aimed at identifying critical success

factors that contribute to favorable antimicrobial prescription patterns among veterinarians are expected to be published in the autumn of 2018. The SDa expert panel will set new benchmark thresholds for veterinarians once the study results have been published.

The SDa board has approved the new benchmarking method and associated benchmark thresholds, and supports the expert panel's conclusions. It has taken note of the dairy cattle and veal farming sectors' joint approach aimed at improving the quality of veal calves supplied by dairy cattle farms. It assumes these improvements and additional measures are necessary to reduce the amounts of antibiotics used in the veal farming sector.

The SDa board would like to conclude with some suggestions for policymakers regarding the usage of antibiotics in the Dutch livestock sector. No matter how well prepared, the introduction of the new benchmarking method and associated benchmark thresholds will be quite challenging for livestock farmers and their veterinarians. Some of the livestock farms previously included in the signaling zone or perhaps even the target zone will turn out to have action zone usage levels when the new benchmark threshold is being applied. In light of this, the SDa board recommends implementing a clearly defined transitional period to enable a gradual transition from the original benchmarking method, with both a signaling and action threshold, towards the new benchmarking approach, which is based on just an action threshold. It feels rapid transitions from 10 to 5 DDDA<sub>F</sub> for the pig farming sector and from 15 to 8 DDDA<sub>F</sub> for the broiler farming sector would probably not be feasible. Considering the livestock sectors have made impressive progress over the past few years, the SDa board wants to avoid causing a sense of disappointment and frustration among livestock farmers on this final stretch towards sustainable, normalized usage levels, as such emotions could affect their compliance. It is up to the policymakers, in consultation with the parties involved, to determine exactly what this home stretch towards acceptable usage levels should look like, although it goes without saying that the SDa is willing to assist in whatever way it can.

Yours sincerely,



F.J.M. Werner  
*Chair of the Netherlands Veterinary  
Medicines Institute (SDa)*



H.M.G. Schreurs  
*Director of the Netherlands Veterinary  
Medicines Institute (SDa)*

Appendix: 1