



Report on Consumption of Veterinary Antimicrobial Drugs in Ireland in 2009

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Background

As part of an EU-wide initiative, known as the European Surveillance of Veterinary Antimicrobial Consumption (ESVAC) project, being coordinated by the European Medicines Agency, the IMB compiled a review of usage of veterinary antimicrobials for the year 2009. This initiative is expected to be repeated annually henceforth.

The consumption data provided in this first report should be interpreted with caution; EU Member States with long experience in collecting similar data is that it can take a number of years of collecting such information to establish reliable baseline values and to be able to analyse trends in the data. Results can be influenced by once-off transactions which affect year-end sales or other influences which could lead to under- or over-estimation of actual consumption and spurious individual results.

Methodology

Companies marketing veterinary antimicrobial products in Ireland were requested to submit annual returns for quantities of dose forms sold in 2009. The data to be provided were described in the ESVAC protocol (www.ema.europa.eu). Data were collected from a total of 40 individual antimicrobial substances contained in 475 product presentations which have been authorised for use in Ireland. The data are based on self-declarations by applicant companies. It should be noted that certain other antimicrobial products (e.g. those authorised under special licence by the Department of Agriculture) or human antimicrobial medicines which might be prescribed by veterinary practitioners where there is no suitable veterinary alternative licensed were not included in this analysis.

In conformity with the ESVAC protocol, the analysis of the data in respect of individual substances of the same antimicrobial classes have been grouped together and classified under the appropriate class headings. In this report the headings are as follows: penicillins, amphenicols, tetracyclines, quinolones, aminoglycosides, macrolides & lincosamines, sulphonamides & trimethoprim (TMP), cephalosporins and other classes.

Results

Noting the cautionary remark that given this is the first time that veterinary antimicrobial data have been collected in Ireland and that the data should be interpreted with caution, the overall reported usage of veterinary antimicrobials for the year 2009 was 104 tonnes approximately.

The results are provided graphically in Figures 1 and 2 below:

Figure 1. Breakdown of veterinary antimicrobial substances by their chemical class

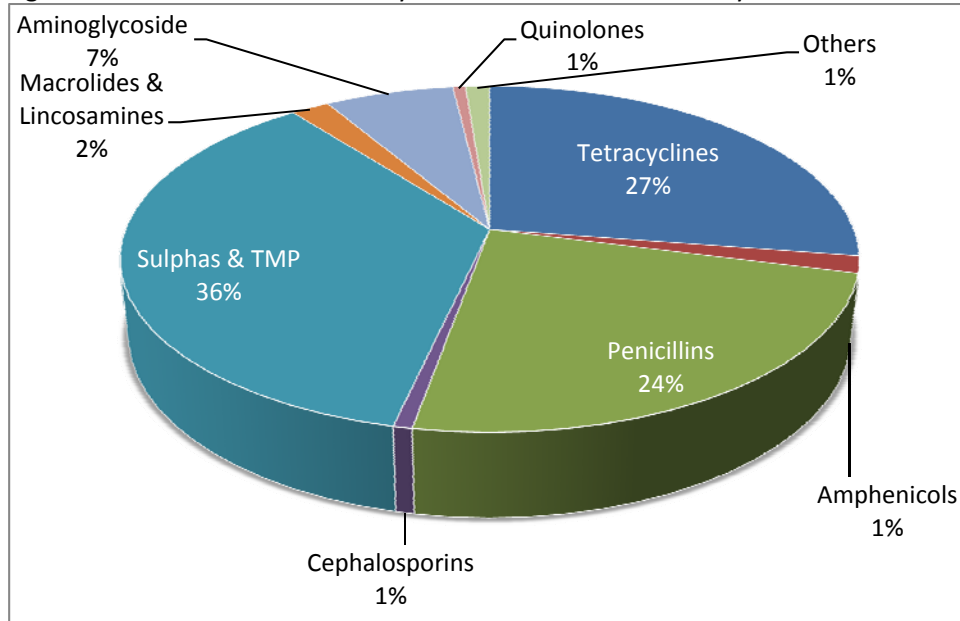
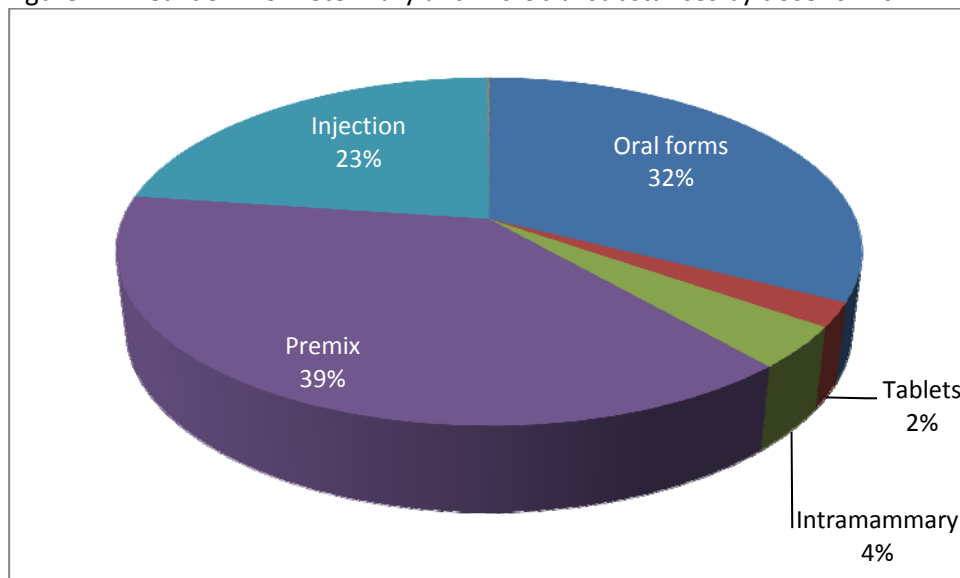


Figure 2 . Breakdown of veterinary antimicrobial substances by dose forms



Discussion and conclusion

Tetracyclines, penicillins, aminoglycosides and trimethoprim/sulphonamide drugs account for 94% of the reported use of veterinary antimicrobials during 2009. The use of cephalosporins, quinolones, macrolides and other drug classes amounts to less than 6% of the total. This breakdown contrasts to that reported by McGowen *et al*, 2011¹ in respect of antimicrobial usage in human usage in community care in Ireland in 2005 where penicillins, macrolides, tetracyclines, cephalosporins and quinolones accounted for 49%, 16%, 12%, 10% and 5% respectively.

¹ McGowen, B., Bergin, C., Bennett, K., and Barry, M. 2011. Utilisation of Antibiotic Therapy in Community Practice, *Irish Medical Journal*, 104(4).

Medicated premix and other oral dosage forms including tablets account for some 73% of the reported use, with injectable forms accounting for a further 23% approximately. Intramammary formulations are reported to account for some 4% of total usage.

This report is expected serve as a benchmark by which future trends in veterinary antimicrobial consumption can be gauged. The currently available analytical tools do not allow for direct comparisons between the position of Ireland relative to other EU Member States (as the data will be affected by the relative livestock species populations, production systems etc.). It is expected that a methodology to enable such comparisons will become available in due course.