

CONSUMPTION OF ANTIMICROBIALS in Finnish swine herds 2014

Sanna Nikunen¹, Pirjo Korttesniemi¹, Mari Heinonen²
 1) Animal Health ETT, Seinäjoki, Finland
 2) University of Helsinki, Saarentaus, Finland
 Corresponding author: pirjo.korttesniemi@ett.fi



INTRODUCTION

Use of antimicrobials for animals in Finland has always been low compared to other countries. However no exact knowledge is available about the amount of antimicrobials used in Finnish pig production. This abstract describes the use of antimicrobials in Finnish swine herds for the first time.

MATERIALS AND METHODS

Finnish pig producers record their medicine use either straight to Finnish swine health program's (Sikava) webpage or they use Agrosoft's WinPig program to send the data to Sikava via interface. We collected information from January 1st to December 31st in 2014 from 1282 pig holdings, which was 90,4% of the 1418 pig herds in Sikava. Seventy-eight holdings (6%) informed that they don't use antimicrobials at all. This data consists of 250521 recordings.

Table 1:
Used antimicrobials in the ranking order and the amounts used as active substance (kg).

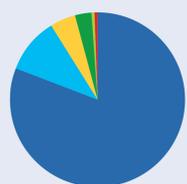
1	Benzylpenicillin	1199	
2	Chlortetracyclin	1138	
3	Sulfonamides with trimethoprim	290	
4	Amoxycillin	143	
5	Oxytetracyclin	88	

RESULTS

Use of different antimicrobials is presented in table 1. Indications and animal groups for the three most commonly used antimicrobial substances are presented in figures 1–5.

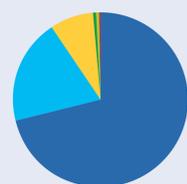


Figure 1:
Use of penicillin for different animal groups (%).



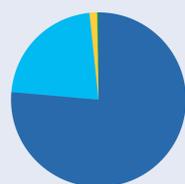
Finisher	81,0
Sow	10,2
Weaned piglet	4,7
Unweaned piglet	3,0
Gilt	0,7
Boar	0,3

Figure 2:
Indications for penicillin use for finishers, % of the total use in this group.



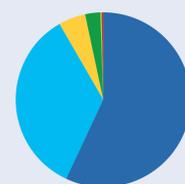
Tail biting	71,3
Anorexia without other symptoms	19,4
Other legproblem	7,9
Respiratory infection	0,5
Erysipelas	0,4
Arthritis	0,2

Figure 3:
Indications for chlortetracycline use, % of total use. Chlortetracycline was used only for finishers (87%) and weaned piglets (13%).



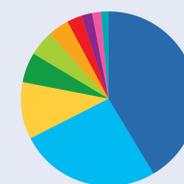
Respiratory infection caused by APP	76,6
Diarrhea	21,9
Other respiratory infection	1,4
Miscellaneous	0,1

Figure 4:
Use of sulfonamides with trimethoprim in different animal groups (%).



Weaned piglet	56,9
Sow	34,7
Unweaned piglet	5,0
Finisher	2,8
Boar	0,4
Gilt	0,1

Figure 5:
Indications for use sulfonamides with trimethoprim in sows, % of the total use. In weaned piglets 99,7% of usage was given to treat diarrhea.



Metritis in lactation period	41,7
Milk fever, MMA, PDS	26,1
Farrowing related treatment	10,6
Mastitis	5,6
Urinary tract infection	4,7
Fever without other symptoms	3,9
Arthritis or other leg problem	2,8
Miscellaneous	1,7
Metritis outside lactation period	1,7
Anorexia without other symptoms	1,3

CONCLUSION

This data covers most of the Finnish pig production and is therefore well applicable in most of the herds. In Finland, narrow spectrum antimicrobials are used in most cases. The national recommendations given

by Finnish Food Safety Authority Evira in 2009 are well adapted. However respiratory and intestinal infections are commonly treated with tetracyclines, which is not according to recommendations.