

Updated erratum DANMAP 2015

11 May 2017

Update - Consumption of fluoroquinolones in household pets

We have become aware of inaccuracies in the reporting of antimicrobial consumption in companion animals in the DANMAP 2015 report. We bring this erratum because one of the inaccuracies involves the consumption of fluoroquinolones (an antimicrobial of critical importance in humans) in household pets. In the report, total consumption in these species was presented as 6 kg active compound. The updated figure is 12 kg.

The relevant text and Table 4.1 (page 30) has been corrected accordingly in the web-version of the report on 11 May 2017. The revised section on antimicrobial consumption in companion animals (page 39 of the DANMAP 2015 report) reads as follows:

The information available on antimicrobial consumption in companion animals (horses and household pets) is not as detailed as for production animals.

A large proportion of antimicrobials used for companion animals are prescribed for treatment of chronic or recurrent disease, mainly dermatitis. Particularly the consumption of critically important antimicrobial agents could pose a risk to owners of diseased dogs that are frequently treated.

In 2015, the use of fluoroquinolones for use in household pets was 12 kg, compared with 9 kg in 2014. The amount of fluoroquinolones constituted 71% the total veterinary use (measured in kg) of fluoroquinolones in 2015, with the remainder used almost exclusively for horses. Similarly, household pets accounted for a significant proportion (161 kg or 69%) of the use of cephalosporins used in animals.

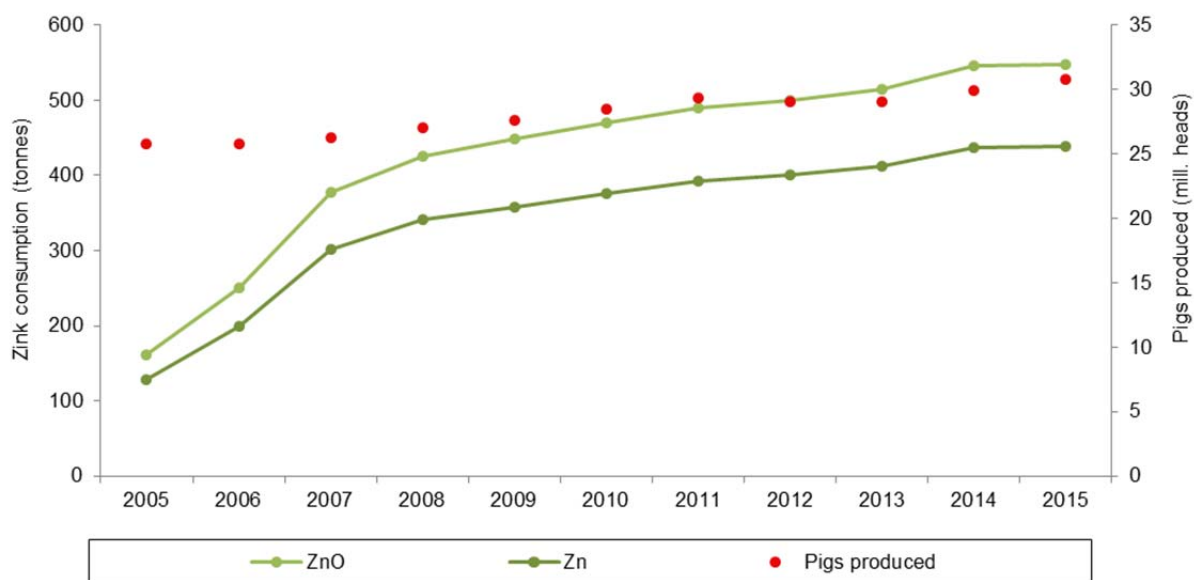
Over the past three years the consumption of fluoroquinolones for use in household pets has fluctuated from 9-12 kg, while the use of cephalosporins has been reduced from 211 kg in 2014 to 161 kg in 2015. During the same period we have observed a slight shift in use of the different antimicrobial classes. This may be an effect of treatment guidelines issued by Danish Veterinary Association in November 2012, recommending that use of critically important antimicrobials should be reduced as much as possible.

Update - Consumption of zinc in the pig production, 2005-2015 (issued in 8 February 2017)

In DANMAP 2015, the data on use of medical zinc in the pig production were extracted from VetStat in March 2016. Since then, incorrect registrations concerning the use have been identified in VetStat and consequently investigated and corrected by the Danish Food and Veterinary Administration. This affects our conclusions in DANMAP 2015. We have, therefore, updated the text and figure concerning the use of zinc in accordance with new data. The updated **data were extracted from VetStat in January 2017**.

Figure 4.6 shows the use of medical zinc in Danish pig production. The use of zinc oxide prescribed by veterinarians has increased over the last decade. From 2005 to 2011 there was a three-fold increase in use of zinc and zinc oxide reported to VetStat. Since 2011 the use of medical zinc for pigs has continued to increase steadily.

Figure 4.6. Consumption (tonnes) of zinc oxide (ZnO) and zinc (Zn) in the pig production, Denmark 2004-2015



Note: Data for this figure were extracted from VetStat January 2017. The figure includes only medical zinc/zinc oxide reported by pharmacies and feed compounders and which has been registered specifically as used for pigs.

Erratum - Antimicrobial consumption in animals and humans (issued in December 2016)

4. Antimicrobial consumption in animals

In **Section 4.1.1** of the printed version of DANMAP 2015, concerning data sources, there was an inaccuracy in the reference to the data used in DANMAP 2015.

The data concerning the use of zinc oxide in pigs were extracted in March; the data on coccidiostatic agents in July, and data on antimicrobial agents in October. The text has been corrected accordingly in the web-version of the report on 8 December 2016 (see text in italics below).

Page 31:

4.1.1 Data sources

Data on antimicrobial use at the product level have been collected in Denmark since 1996, including historical data back to 1990. In Denmark, all therapeutic medicine is available by prescription only, and since 2001, data on all medicine prescribed for use in animals, including vaccines, have been collected in a national database (VetStat). Data on consumption of coccidiostatic agents (non-prescription) and antimicrobial growth promoters (no longer used), are also collected in VetStat.

Consumption data for 2015 used in DANMAP were extracted from VetStat by the Danish Veterinary and Food Administration (DVFA) in March (zinc oxide) and October 2016. The National Food Institute DTU carried out no further validation of the received data. Data were extracted for 2004 to 2015 and the antimicrobial consumption was recalculated for all years, thus the results in DANMAP 2015 may differ slightly from what has been published in previous DANMAP reports, as VetStat is a live database with many input users. Furthermore, data concerning use of coccidiostats were also obtained from VetStat (July 2016) and these are presented in Textbox 4.1

5. Antimicrobial consumption in humans

In **chapter 5** "Antimicrobial consumption in humans", unfortunately two errors occurred in the text, one regarding the prescription of antimicrobials to humans (bullet point 3 in "highlights" on page 44), and one regarding the text on antimicrobial consumption per 100 hospital admissions on page 59, where a wrong paragraph was mistakenly inserted. The errors are corrected for in the web-version on 8 December 2016. The corrected text is shown in italics below.

Page 44

(3)The number of antimicrobial prescriptions per 1,000 inhabitants increased until 2011 but has since declined, showing a total decrease *from 587.47 in 2006 to 511.46 in 2015 (- 13%).*

Page 59:

5.4.3 Other measures of somatic hospital consumption DDD per 100 admissions (DAD)

Because of the observed changes in the number of hospital bed-days over time, the consumption of antimicrobials in Danish hospitals may also be measured in relation to admissions (i.e. DDD per 100 admissions, DAD). When expressed as DAD, the total consumption of antimicrobial agents in somatic hospitals showed a decrease from 2014 to 2015 (*from 324.1 DAD to 313.4, - 3.3%*) (Table 5.6).

Among the leading individual antimicrobial groups, increases for the year 2014 to 2015 were observed for 'combination penicillins' (8.7%), penicillins with extended spectrum (1.6%) and macrolides (15%).

Decreases were observed for most other antimicrobials: beta-lactamase sensitive penicillins (-4.6%), 2nd generation cephalosporins (-13%), fluoroquinolones (- 7.9%) and to a lesser extent for carbapenems (-1.6%).

As observed for the consumption measured in DBD, increases were also observed for the rarely used tetracyclines and linezolid (5.2% and 26%, respectively), while vancomycin showed a marked decrease (-82%).

During the past decade, DAD increased by 9.1%; an increase primarily driven by a higher number of DDDs but counterbalanced by an increase in the number of hospital admissions.