Sales data of

veterinary antimicrobial products

in Germany

2011

- **Introduction**
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Introduction

- Widespread use of antimicrobial agents in food-producing animals is a risk factor for development and spread of antimicrobial resistance

- Data on the usage of antimicrobial agents in food-producing animals wanted for identifying and quantifying the risk of developing and spreading antibiotic resistance in the food chain

Introduction

- Copenhagen Recommendations in 1998
- European Surveillance of Veterinary Antimicrobial Consumption (ESVC) project 2009
  - 2005-2009: „Trends in the sales of veterinary antimicrobial agents in nine European countries“
  - 2012: „Sales of veterinary antimicrobial agents in 19 EU/EEA countries in 2010“

Introduction

ESVAC project

- Sales data collected from 19 countries for 2010 (Germany not included) and from 26 countries for 2011
- For a better comparability the data are broken down by a population correction unit which takes into account the number of food-producing animals (livestock and slaughtered animals) and a standardised weight

Methods

In Germany:

Pharmaceutical companies and wholesalers are obliged to report sales data of veterinary antimicrobial products to veterinarians by law.

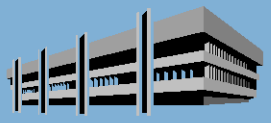
The German Institute of Medical Documentation and Information (DIMDI) is in charge of the database „PharmNet.Bund“ where the data are collected.

Methods

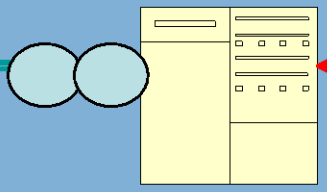
Distribution and ways to report antimicrobial sales data

Veterinarian

Pharmaceutical
Companies



Competent Authority - BVL



Database
DIMDI

Wholesaler

Methods

Data collected:

- Product
- Substance
- Licensed species
- Application form
- Quantities sold (number of packages sold; package size and substance quantity per package)
- First two digits of the postal code

Results

- 1,706 t antimicrobial substances were sold to veterinarians in Germany in 2011.
- 38 pharmaceutical companies and 16 wholesalers reported sales of veterinary antimicrobials in Germany for the year 2011.
- Reports concerned 520 veterinary medicinal products

Results

Substance classes

Tetracyclines	576 t	Lincosamide	17 t
Aminopenicillins	505 t	Pleuromutilins	14 t
Makrolids	185 t	Fluoroquinolons	8 t
Sulfonamids	185 t	Phenicols	6 t
Polypeptide antibiotics	123 t	Cephalosporins	4 t
Aminoglycosides	47 t	(3rd + 4th class)	
Trimethoprim	30 t	all other classes	2 t
other Penicillins	29 t		

Results

Active substances

Ampicillin	36 t	Lincomycin	17 t
Amoxicillin	469 t	Tiamulin	14 t
Penicillin	8 t	Enrofloxacin	6 t
Colistin	124 t	Florfenicol	6 t
Tilmicosin	7 t	Spectinomycin	9 t
Gamithromycin	(-)	Neomycin	30 t
Tylosin	165 t	Clortetracyclin	155 t
Trimethoprim	30 t	Doxycyclin	118 t
Tetracyclin	300 t		

Results

Antimicrobial products used in food-producing animals

- The marketing authorisation is for several species in most veterinary medicinal products therefore an unambiguous correlation to one species is not possible.
- 1,698 t of antimicrobial substance is sold in products which are authorised for at least one food-producing animal species; 1,624 t of these are for oral use
- 8 t antimicrobial substances are from products for companion animals

Results

Veterinary Medicinal Products authorised only for poultry

- 18 products with 32 t antimicrobial substances
- oral products via feed or drinking water
- mostly used: penicillins (22 t), sulfonamids (6.5 t) and fluoroquinolons (3.1 t)

Results

Active substances used only in companion animals

- CEFOVECIN
- CHLORAMPHENICOL
- CLINDAMYCIN
- DIMETRIDAZOL
- FURAZOLIDON
- FUSIDINACID
- IBAFLOXACIN
- METRONIDAZOL
- ORBIFLOXACIN
- POLYMYXIN-B
- PRADOFLOXACIN
- SPIRAMYCIN

3.198 t of these substances were sold in 2011

Results

Regionalized sales data

- First two digits of the postal code
- In regions with high numbers of livestock units per hectare the sales data for antimicrobiell products were higher than in regions with low numbers of livestock units per hectare

Discussion

- Data collected are the amounts of antimicrobial substances sold to veterinarians in Germany in one year

- No data on consumption – no differentiation in which species or for which indication the products are used

Discussion

- Challenge for the future

- To collect consumption data including the information
  - Which species used in
  - Which indication used for
  - Defined Daily Dose Animal (DDDA) and Defined Cure Dose Animal (DCDA)

Thank you for your attention!