

Antibiotikaeinsatz in der Tiermedizin

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Die Welt mit und ohne Antibiotika

prä-antibiotisch

antibiotisch

post-antibiotisch ?

Kriege & Wunden

H1N1
1918

Infectionen, Kindbett

Pest, Cholera,
Typhous und
und...und

Jubel – Erstaunen – Skepsis – Kritik - Ablehnung

sorgfältiger Umgang
= prudent use

MRSA
ESBL
EHEC

Domagk
Flemming

Resistenz

Resistenz

Meilensteine

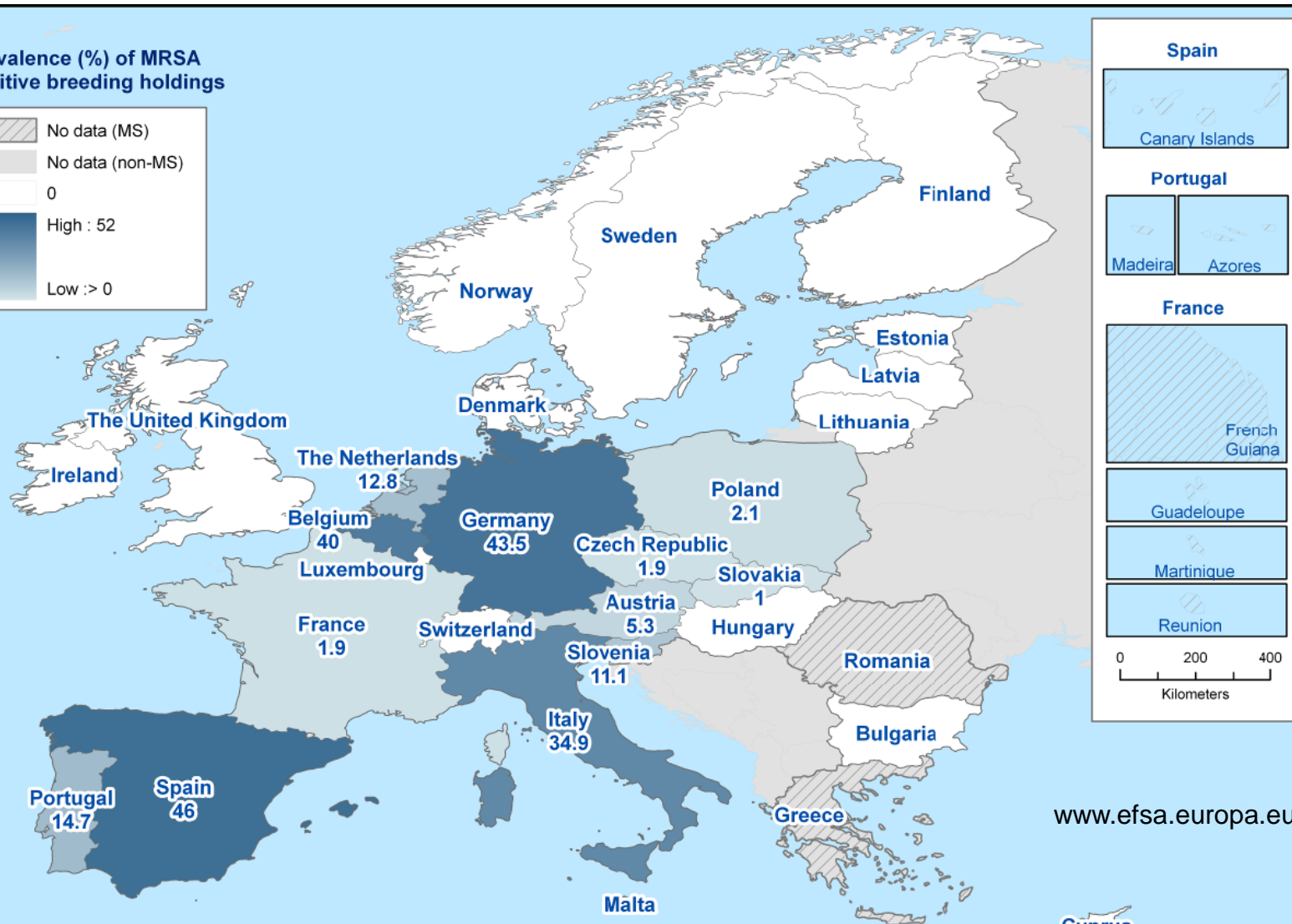
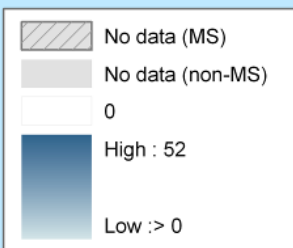
nur tödliche – dann alle – dann Tiere – ganze Herden

Lister, Pasteur
Sammelweis



Results EU baseline study 2008

Prevalence (%) of MRSA positive breeding holdings



www.efsa.europa.eu

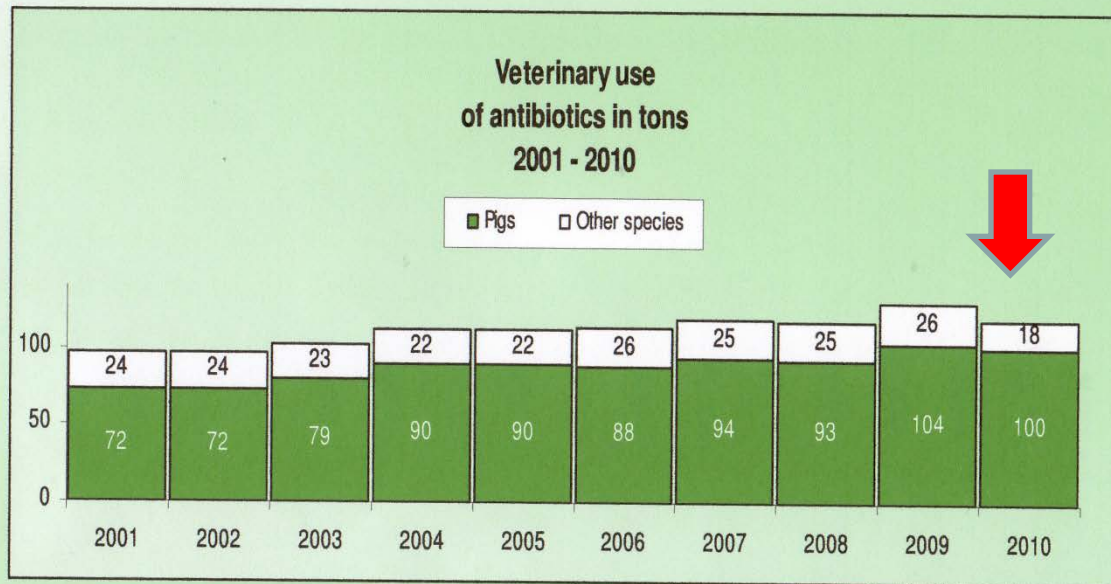


Vortrag von Tim Pedersen 03/11

The result so far: Use of Antibiotics in Animal Production in Denmark

Decrease in
AB-use:

3,5 % from
2009 - 2010

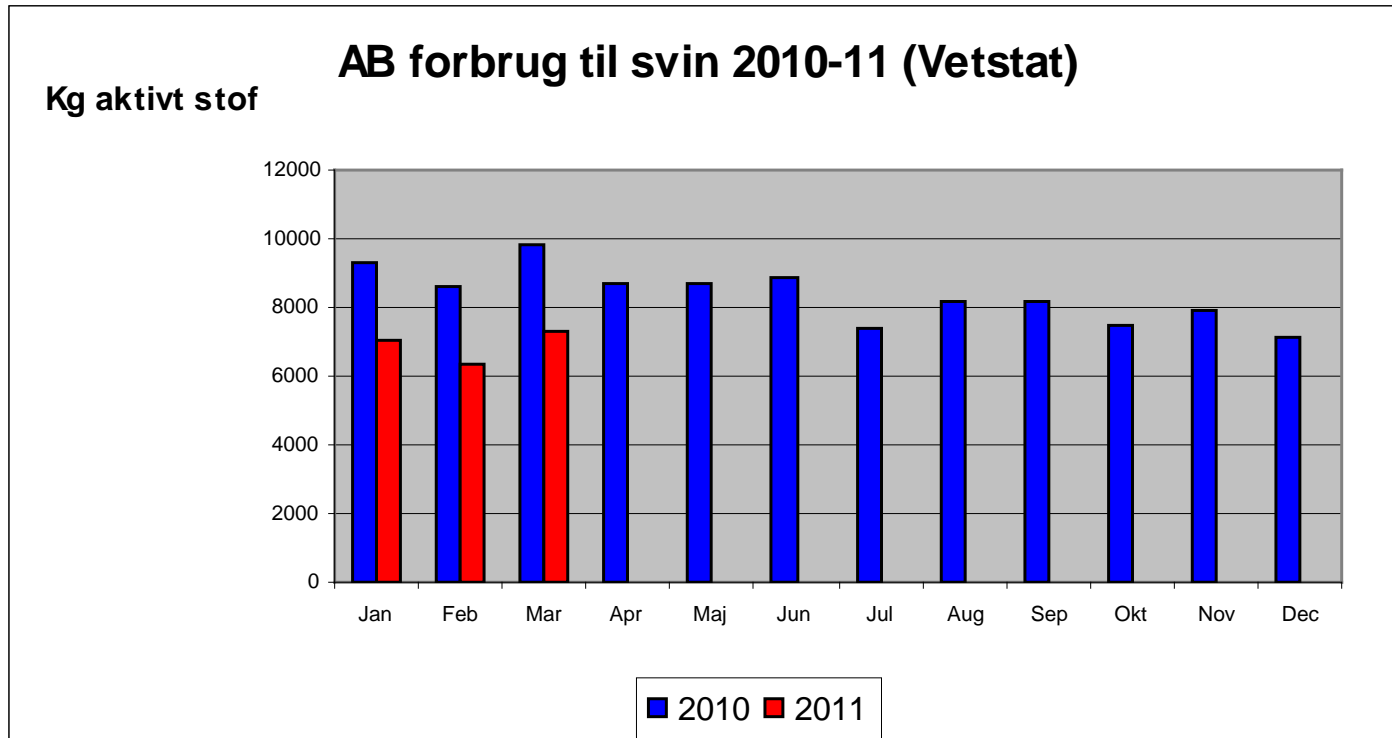


Data from Vetstat





J.P. Nielsen vor DK Parlament



Der TBI zur pro-Tier-Messung

Der „Tierbehandlungsindex“ (= Therapiehäufigkeit)

Die epidemiologische Annahme:

Tiere, die oft antibiotisch behandelt werden mussten, waren weniger gesund, als Tiere, die nicht oder nur vereinzelt behandelt werden mussten

$$\text{TBI} = \frac{\text{Anzahl beh. Tiere (x Wirkst.) x Anzahl Behandlungstage}}{\text{Anzahl der Tiere in der Mastgruppe}}$$

Der TBI gibt also an, wie viele Tage (statistisch gesehen) alle Tiere einer Gruppe oder eines Bestandes antibiotisch behandelt wurden



Real gemessener TBI

- **In 22 zusammengehörigen Herden:**

TBI: 0,00 bis **49,12**

Verlustrate: 1,05% bis **9,49%**

Schlachtbefund-Score: 1,28 bis 4,57

- **In 126 Mastgruppen dieser 22 Herden:**

TBI: 0,00 bis **98,12**

Verlustrate: 0,00% bis **16,77%**

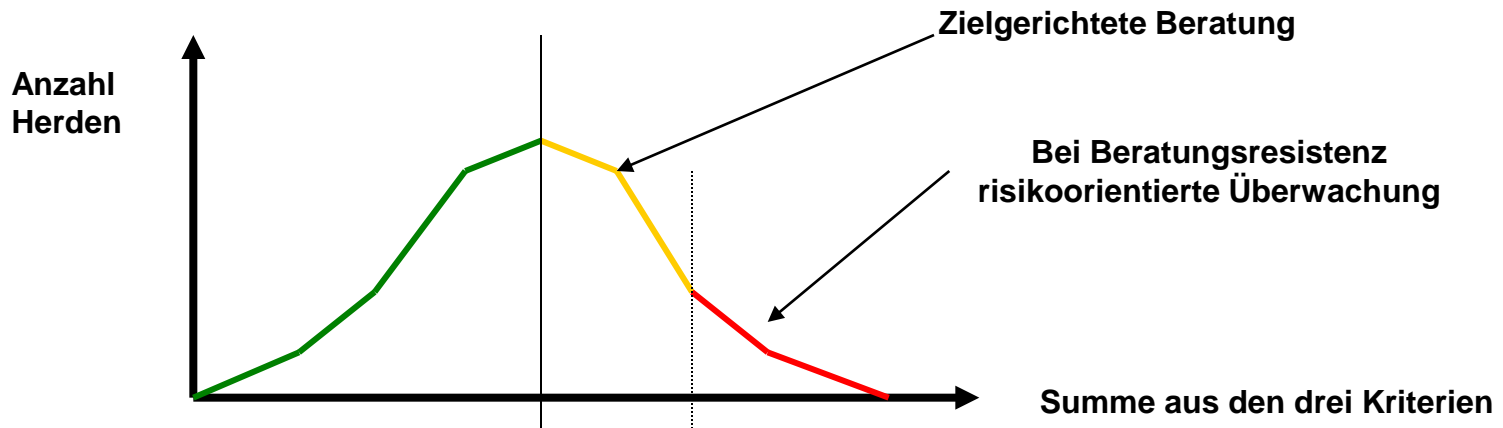
Schlachtbefund-Score: 1,2 bis 6,85%





Benchmarking Tiergesundheit

Kriterien: Verlustrate, TBI, Schlachtbefunde



low → medium → high ← **Verlustrate**

low → medium → high ← **TBI**

low → medium → high ← **Organbefunde**



PCV2 Vakzinierung und Antibiotika

- Daten von Dr. Peter Veldtmann (Vechta, Germany):
- In vier Herden PCV2 Vakzinierung in 2008:

Farm A (700 Plätze, 1 Herkunft):	90% less AB in 2010
Farm B (1000 Plätze, 1 Herkunft):	50% less AB in 2010
Farm C (1350 Plätze, 1 Herkunft):	60% less AB in 2010
Farm D: (1250 Plätze, viele Herkünfte):	10% less AB in 2010

Dr. Veldtmann's Kommentar: Wir verdienen noch genauso viel Geld wie vorher, aber wir haben es jetzt mit gesunden Herden zu tun



Wir müssen die Botschaft ändern

Wenn wir die Antibiotikamenge reduzieren wollen,
müssen wir nicht über

die Reduzierung der
Antibiotika

sondern über die Verbesserung der

Tiergesundheit

reden, und das ist

Tierhaltung, Betreuung, Biosicherheit, Hygiene

Der Tierarzt muss an der Tiergesundheit, und nicht
an der Krankheit verdienen



Und wir müssen außer Reduzieren...

- Wie in Skandinavien, Dänemark und seit Kurzem in Frankreich zu freiwilligen, aber verbindlichen Verzichtserklärungen kommen, in der Tiermedizin (Nutztierhaltung) die „kritischen“ Wirkstoffe einzusetzen
- Und: die Anwendung von Antibiotika muss wie Tierschutz zu einem **„öffentlichen Schutzgut“** werden, was die „Therapiefreiheit“ des Tierarztes (und Arztes) einschränken würde, aber...





Thank you!



FVE looks beyond „prudent use“

Husbandry (not so much veterinarians) seems to be recognised more and more as THE determinant for the need to use antimicrobials

FVE recognises that recording the amount of antimicrobials is not doing harm to veterinarians, but will help to identify room for herd health improvements

That's a challenge, but much more a chance for the veterinary profession

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FEDERATION OF VETERINARIANS OF EUROPE

FVE/11doc011
(rev 4)

The Federation of Veterinarians of Europe views and action points for keeping antimicrobials effective, now and in the future

The development of antimicrobial substances has enormously contributed to improving the health and welfare of people and animals throughout the world. The continuous availability of a range of effective antimicrobials therefore is a fundamental « One Health » issue. However there is a risk that the use of antimicrobials can result in resistance, which could seriously impact the health and welfare of animals and people. The on-going analysis of this risk and adequate management measures require commitment and collaboration of all parties concerned: the veterinary profession, the medical profession, animal owners, patient organisations, politicians and industry, etc. To be successful everyone should contribute his share to an overall strategy.

FVE wishes to contribute with the following actions:

- FVE develops and promotes the development of guidelines (for each species) on the responsible use of antimicrobials.
- On Antimicrobial Awareness Day, FVE in cooperation with the Polish Presidency will organize a Seminar, to raise awareness and to promote responsible use of antimicrobials
- FVE promotes stricter conditions for the use of certain categories of antimicrobials, which have special importance in human medicine (e.g. fluorquinolones and 3rd and 4th generation of cephalosporines)
- FVE calls for a change in the cascade and will promote strict compliance with the cascade.
- FVE support the establishment of a system for reporting all veterinary use and prescription of antibiotics to the competent authority in each country
- FVE wishes the following points of view to be taken into the strategy on antimicrobial resistance:

1. Veterinary expertise

The veterinary profession has a great deal to offer in relation to the prevention of antimicrobial resistance, with its knowledge and understanding of Good Veterinary Practice and the responsible use of medicines. More-over - veterinary medicine being a regulated profession - all veterinarians are supervised by and accountable to the national statutory body, or an equally functioning organisation. Therefore and realizing that room for improvement will always exist, FVE believes that improvements will be best achieved by allowing veterinarians to apply their knowledge whilst keeping him/her responsible and accountable for doing so, rather than through generally applied restrictive rules and regulations.

2. Research and Education

FVE believes that further research in several areas is indicated in the occurrence of intra- and interspecies transmission of resistant strains. A better understanding being essential for taking effective measures.

Special attention should be given to the relationship between the use of antimicrobials in the medical field and that in the veterinary field and the way this affects the transmission of resistant strains. An additional area for further research is the development of on-site



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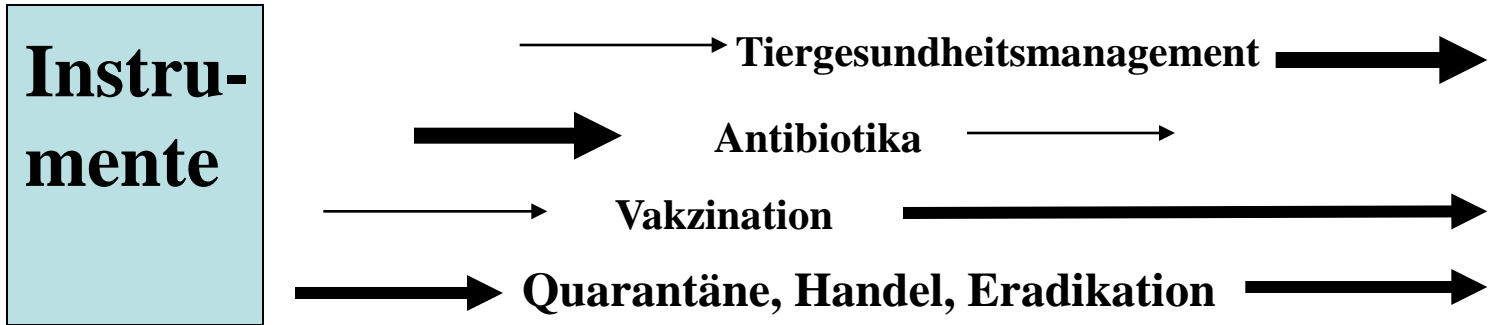
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Tiergesundheit ist ein quantitatives Phänomen



...kein „Nein“ oder „Ja“, sondern ein „Weniger“ oder „Mehr“



Würmer
und
Seuchen

Lungen- und
Darmerkrankungen

Wenig Krank-
heit mit viel
Medikamenten

Wenig Krank-
heit mit wenig
Medikamenten

Frei von Krank-
heitserregern



sehr schlecht

Tiergesundheit

sehr gut





Die Tiergesundheitsfürsorge im Wandel der Zeit

