The Danish approach to reducing farm antibiotic use

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Reduction of antibiotic usage

Not a new thing – started 20 years ago

Legislation and industry initiatives
  • Laws
  • Voluntary bans

Focus on animal health many years before that
  • Pigs
    — SPF-system for pigs – 1968
Industry initiatives

AGP’s
• Voluntary stop finishers 1998
• Voluntary total stop 2000

Cephalosporins
• 2010 voluntary stop for 3. and 4. generation cephalosporins in the pig production
• Not used for Danish broilers
• Reduced use cattle

Very restricted use of fluoroquinolones
• Law, but strongly supported by the industry

SPF system
Ban on generics
Separation of sales and advice

Figure AP1.1. Consumption of antimicrobial agents and growth promoters in animal production and prescribed antibacterials in humans. Denmark.
Separation of advise from sale of antibiotics – ban of sale of generics

**Pigs**

Vet not allowed to sell antibiotics (except for 5 days emergency treatment)

Health advisory contract between producer and vet

- Vet writes prescription to producer
- Pharmacy delivers the product
- Producer can keep antibiotics for 35 days

Removes incentive for prescribing too much

Changes focus to management and prevention
Benefits

Removes incentive for overuse
Transparent pricing of advise and medicine

Farmers organisations and veterinary organisation supported the change
Ban on generics
Separation of sales and advice

Figure AP1.1. Consumption of antimicrobial agents and growth promoters in animal production and prescribed antibacterials in humans, Denmark

Vetstat

Antimicrobial (tonnes)
Vetstat

Vet

Pharmacy

Producer

Medicin

Data

Vetstat
Veterinary and Food Administration
Effect of Vetstat

Statistics on antibiotics (and all other medicines)
- On country level
- On type of production-level
- On farm level
- On vet-level

No direct effect on usage
- But necessary for the yellow card initiative
Figure AP1.1. Consumption of antimicrobial agents and growth promoters in animal production and prescribed antibacterials in humans, Denmark

Voluntary ban AGP finishers

DANMAP 2010
Figure AP1.1. Consumption of antimicrobial agents and growth promoters in animal production and prescribed antibacterials in humans, Denmark

Voluntary ban AGP finishers
Voluntary total ban
2010 Yellow card initiative

Herds with more than double the average consumption

ADD – Animal daily doses

Placed under extra supervision

If not successful in reduction
  • Second opinion visit
  • Other restrictions can be enforced – reduction of production level
Antibiotic usage in the pig production from 2001 to 2011
Critically important antibiotics

Restrictions on fluoroquinolones
  • Only for very specific indications – less than 1 kg per year

Voluntary ban on cephalosporins for pigs
  • Only for very specific indications – 1.3 kg in 2011
Salmonella – pork – relevant antibiotics 2011

- Cefalosporin
- Fluoroquinolone
Open declaration of all participating herds

www.spf.dk/sus

Open to the public
Potential buyers
Neighbours

Information on SPF-status, Salmonella, PRRS

Managed and owned by the pig production
SPF

Declaration system
Close to 4000 herds declared
73 % the pigs born in the SPF-system

- 45 % PRRS positive
- 16 % AP2 positive
- 0.5 % swine dysentery positive
- 2 % Atrophic Rhinitis positive
Focus on prevention

Avoiding and eradicating diseases - SPF
Declaration on all pig herds - SPF
Increase in vaccine sales
Broiler industry

95% of broilers does not receive any treatment at all
Wishes for the future

DAFC is supporting and advocating prudent use

Change the way of policy making
- Stop focus on total use of antibiotics
- Focus on critically important antibiotics
- Use of scientific risk assessments for policy making

Increased research in animal health management
- More problem solving from science
- Less problem finding