

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

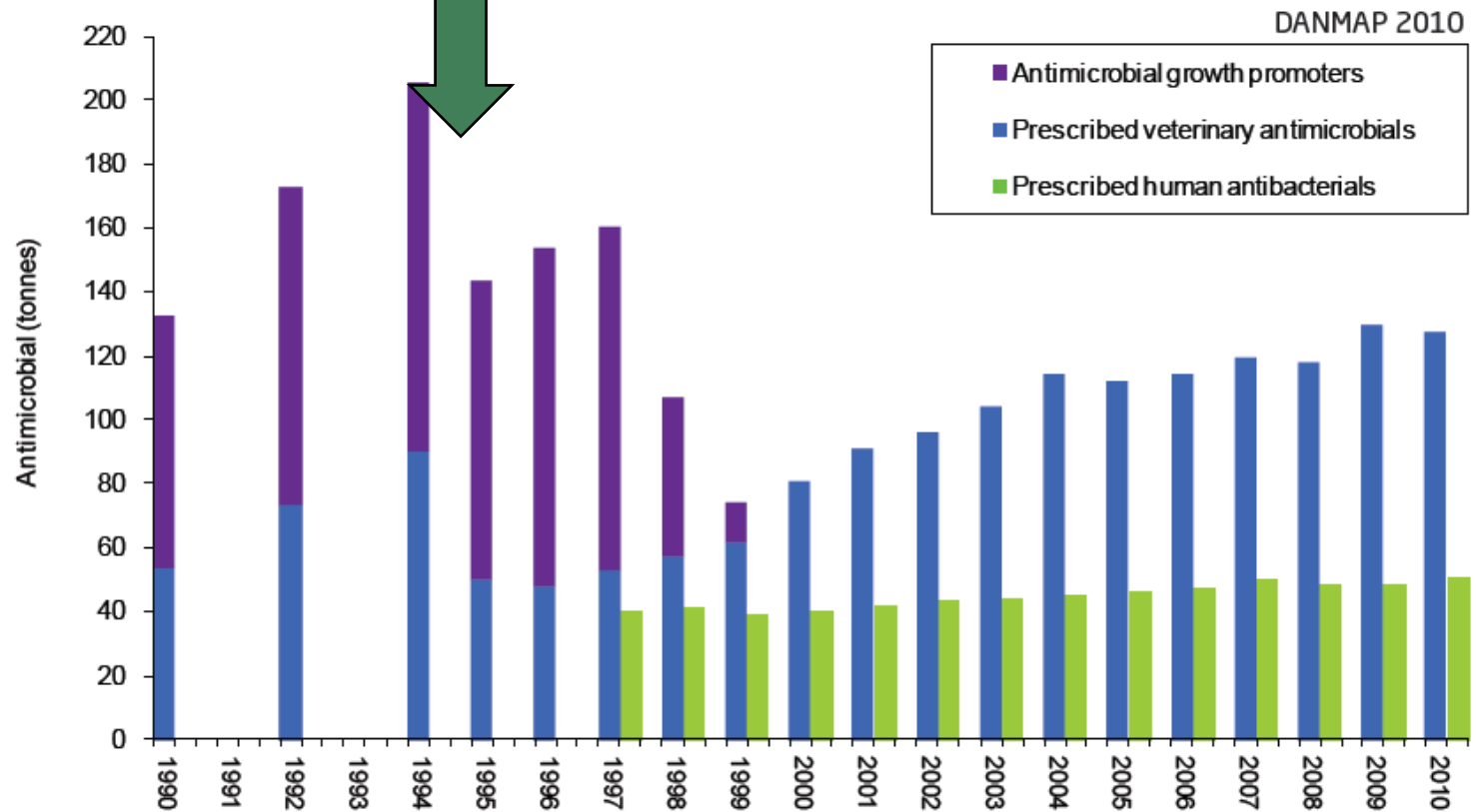
Very restricted use of fluoroquinolones

- 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

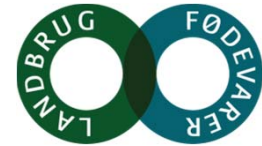
Vet not allowed to sell antibiotics (except for 5 days emergency treatment)

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

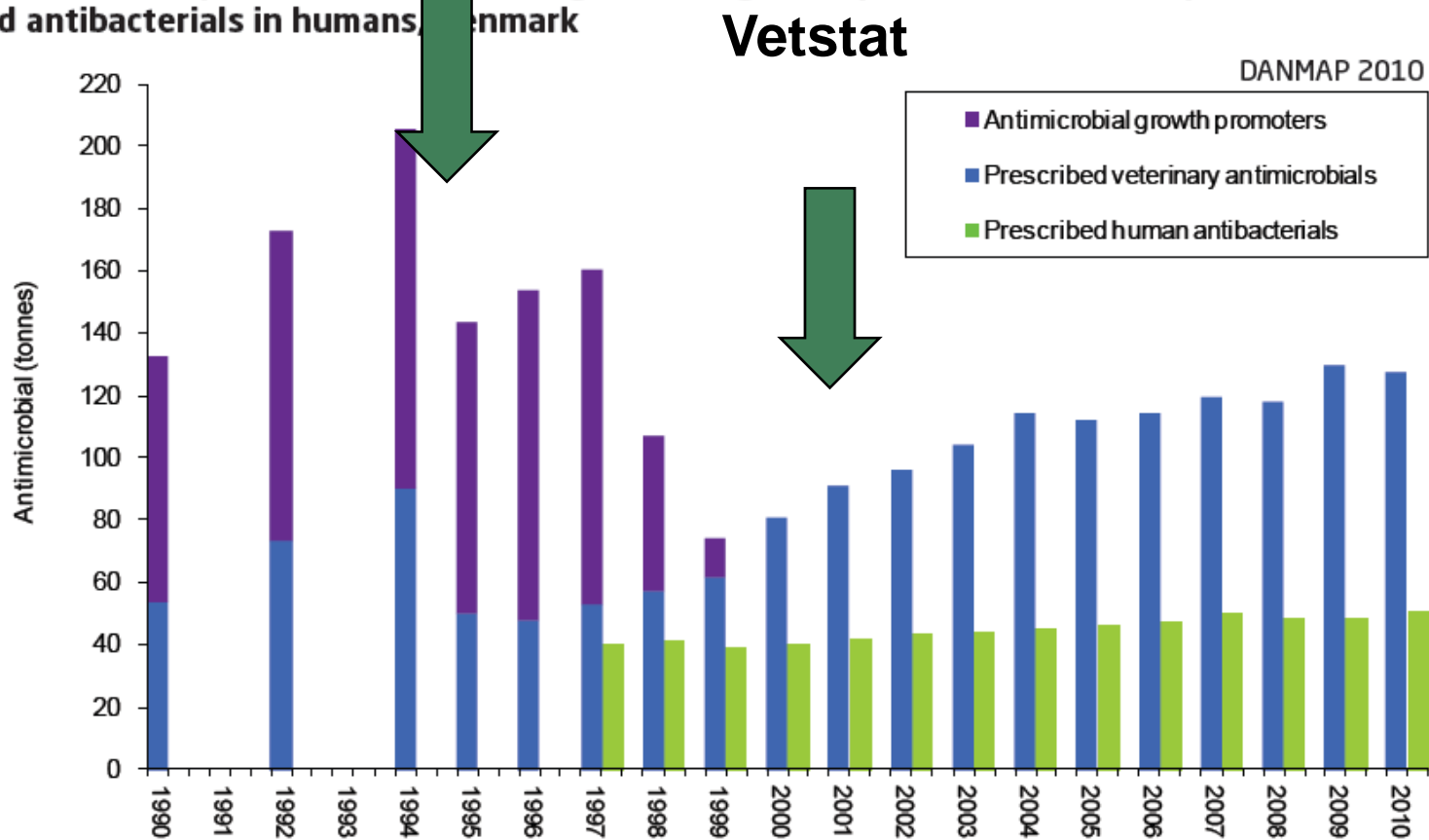
Removes incentive for overuse

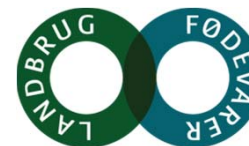
Transparent pricing of advise and medicine

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

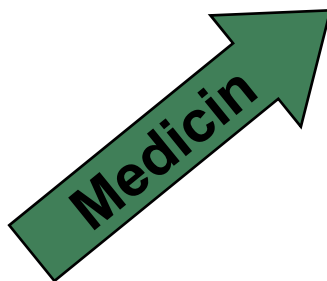




Vetstat

Vet

Producer



Pharmacy



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

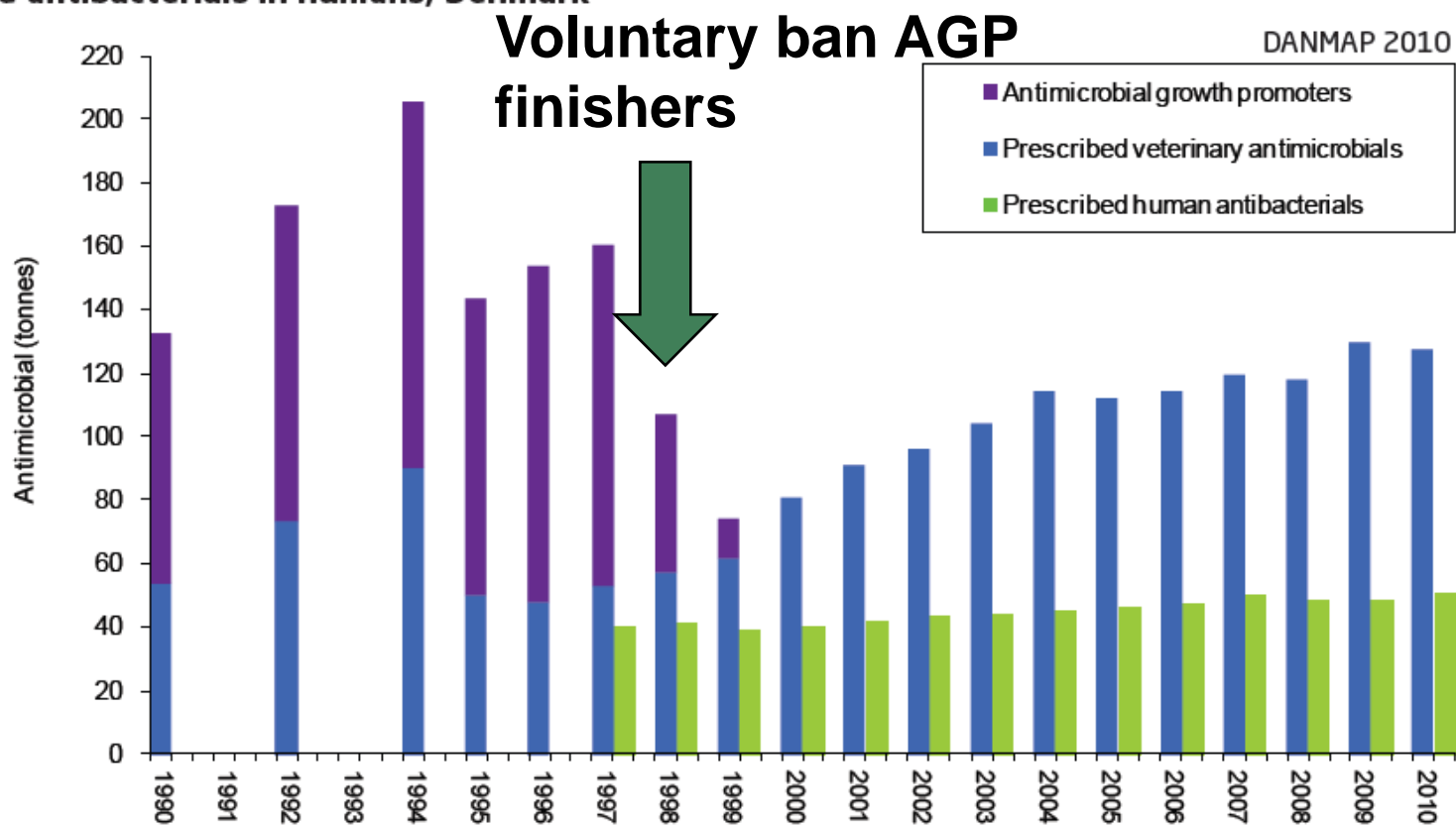
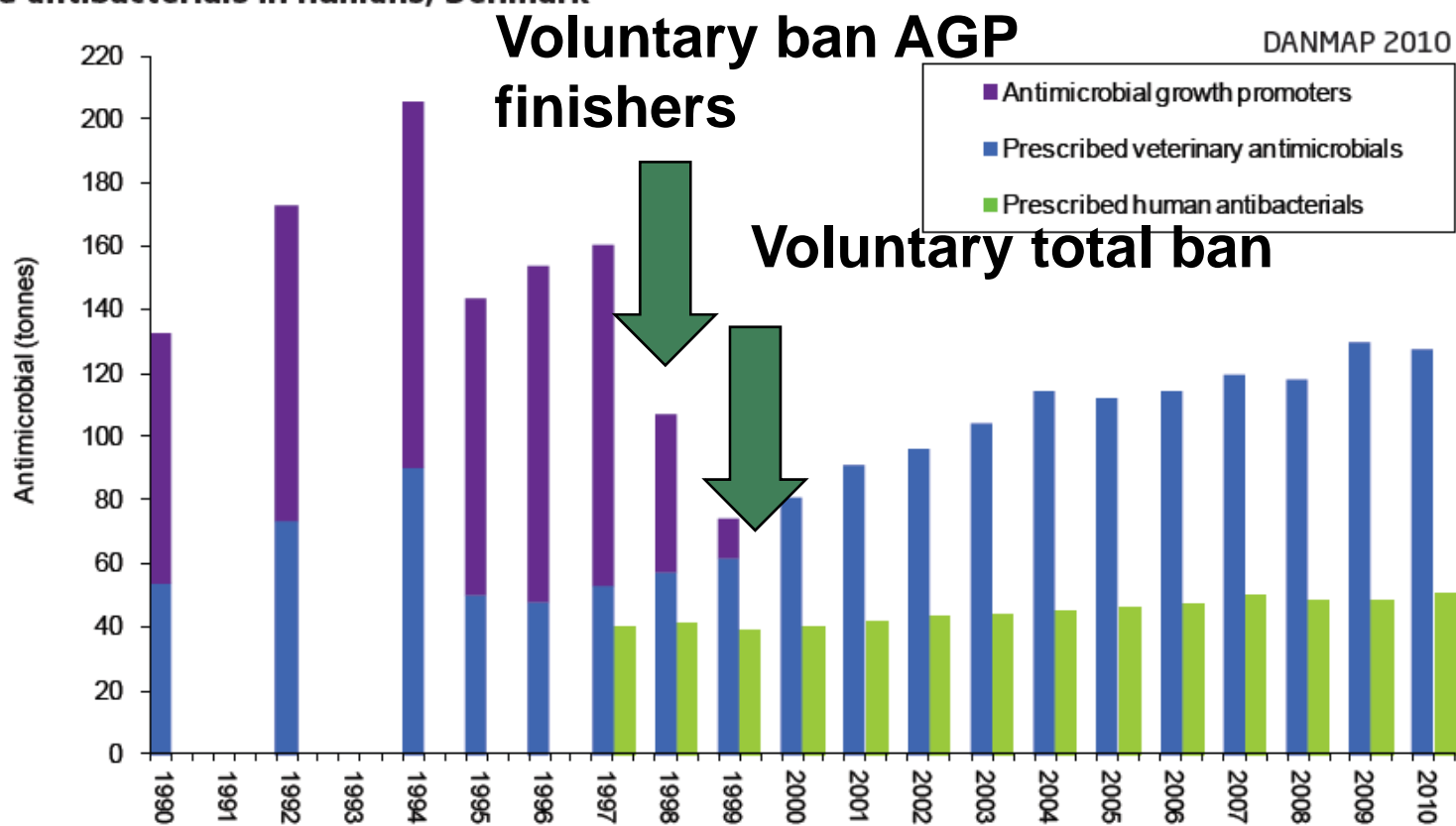


Figure AP1.1. Consumption of antimicrobial agents and growth promoters in animal production and prescribed antibacterials in humans, Denmark





2010 Yellow card initiative

Herds with more than double the average consumption

ADD – Animal daily doses

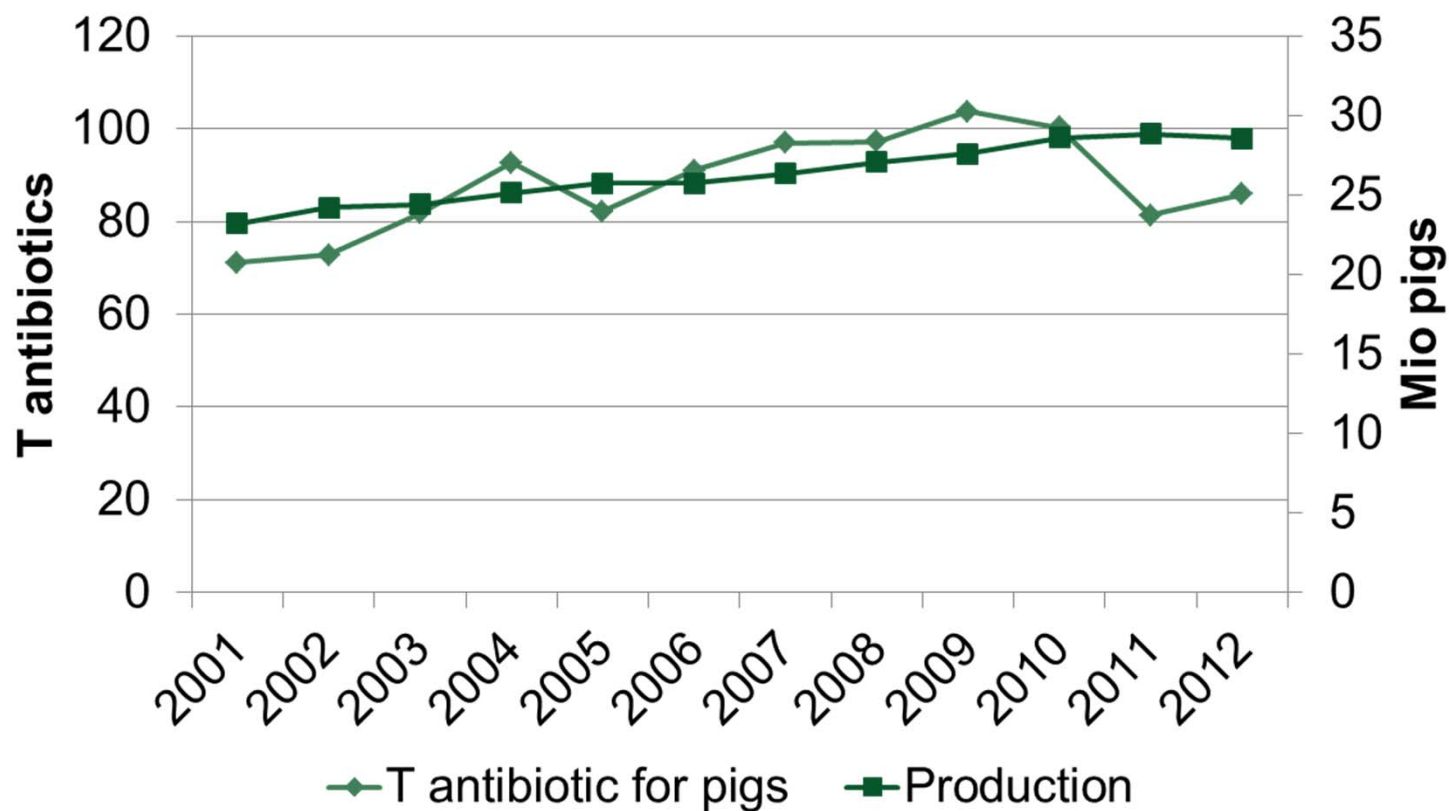
Placed under extra supervision

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

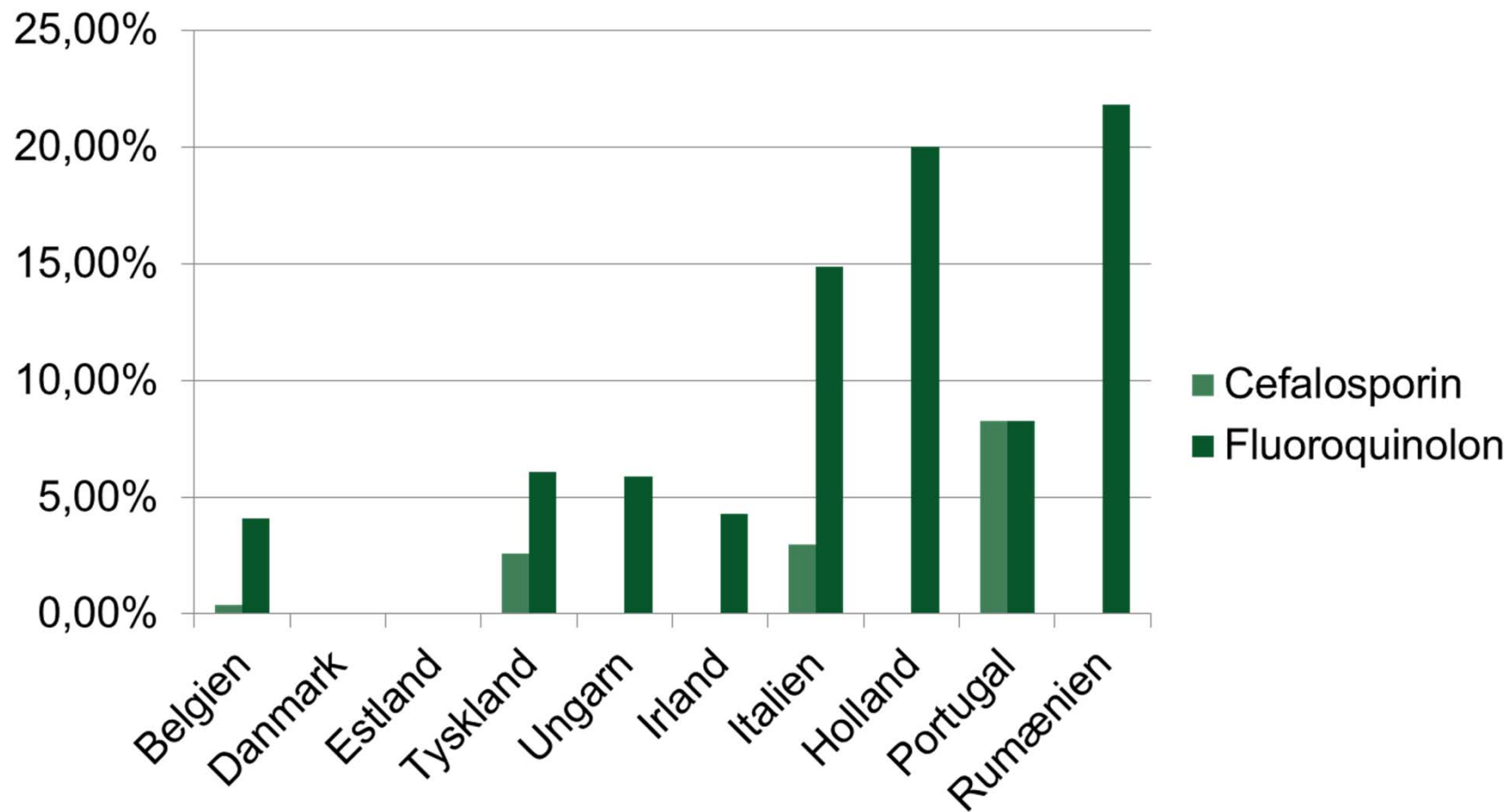
Restrictions on fluoroquinolones

- Only for very specific indications – less than 1 kg pr year

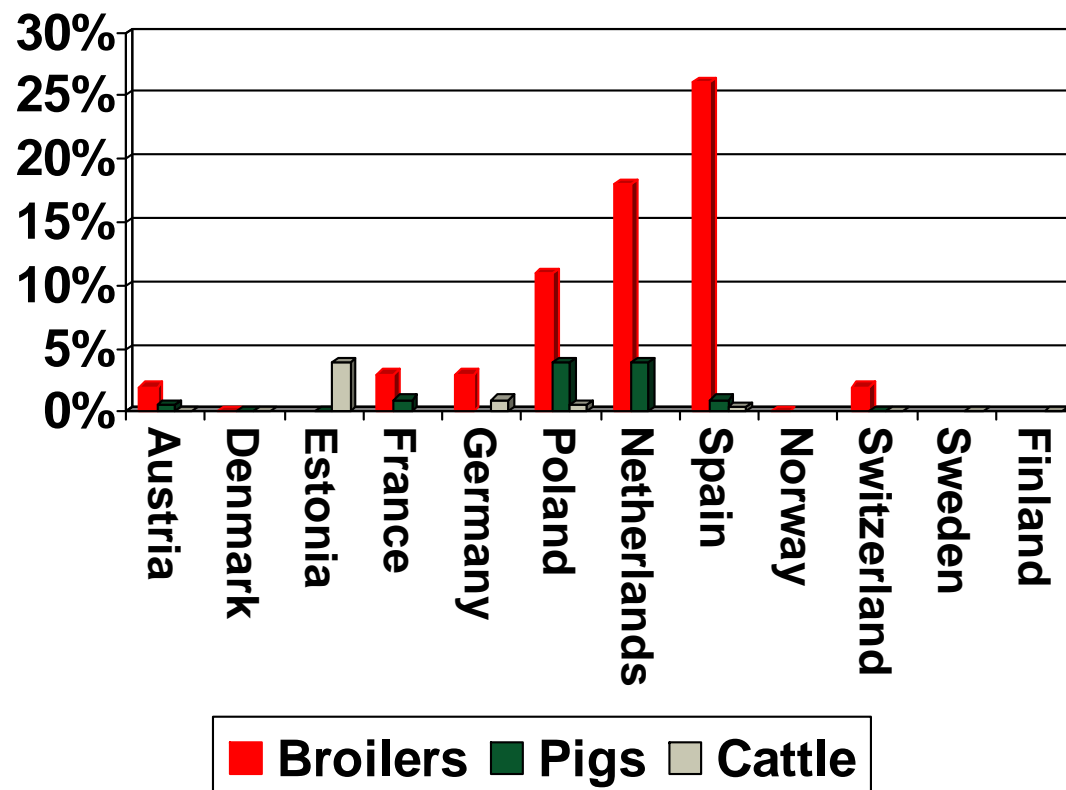
Voluntary ban on cephalosporins for pigs

- Only for very specific indications – 1.3 kg in 2011

Salmonella – pork – relevant antibiotics 2011



Percent ESBL-positive coli





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

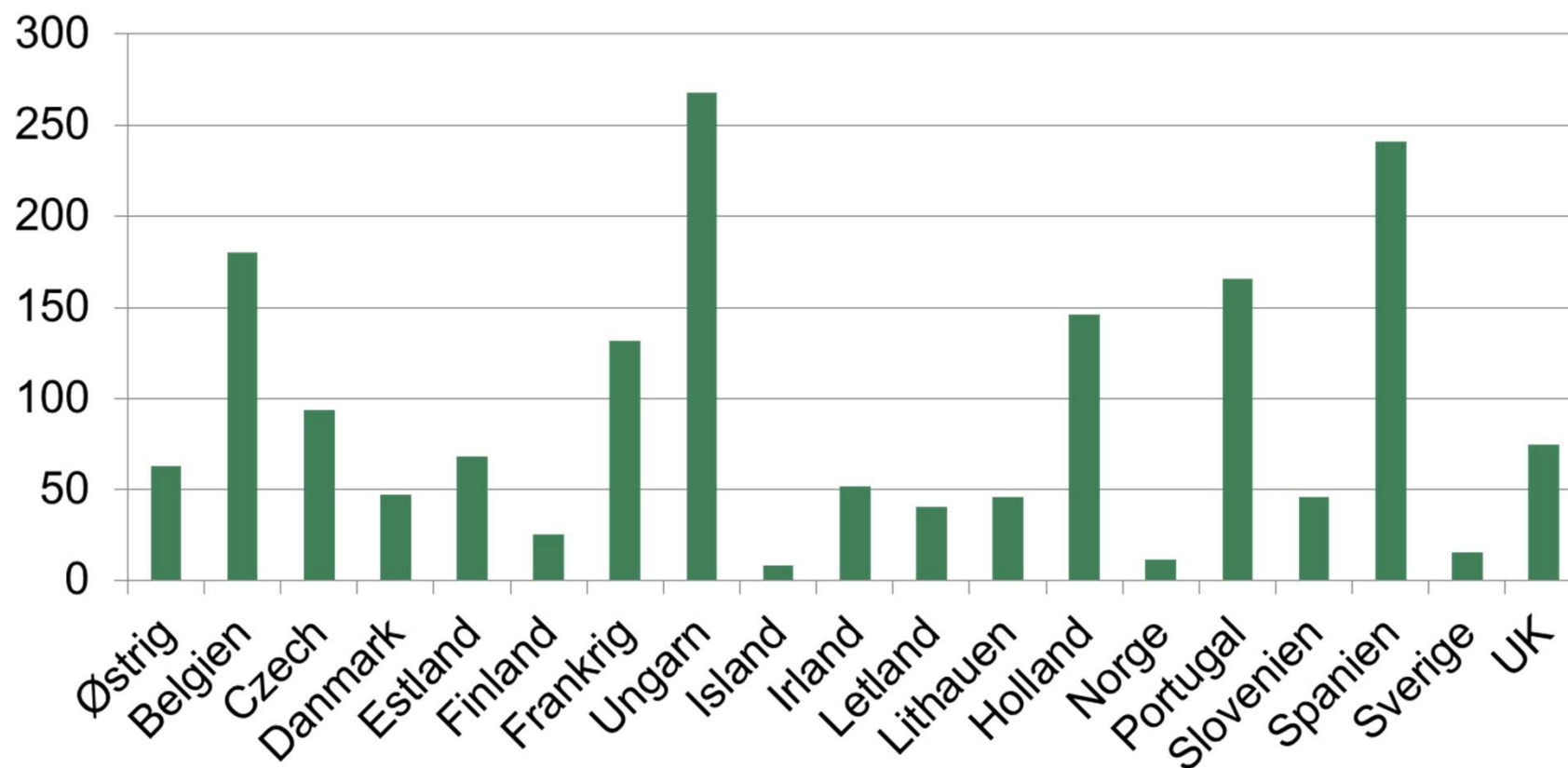
Avoiding and eradicating diseases- SPF

Declaration on all pig herds -SPF

Increase in vaccine sales



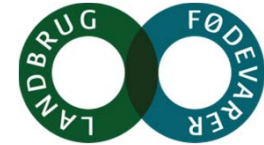
MG/kg animal - 2010





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