

Optimized pig production with less antibiotics

The Nordic Model in EU perspective

Margit Andreasen

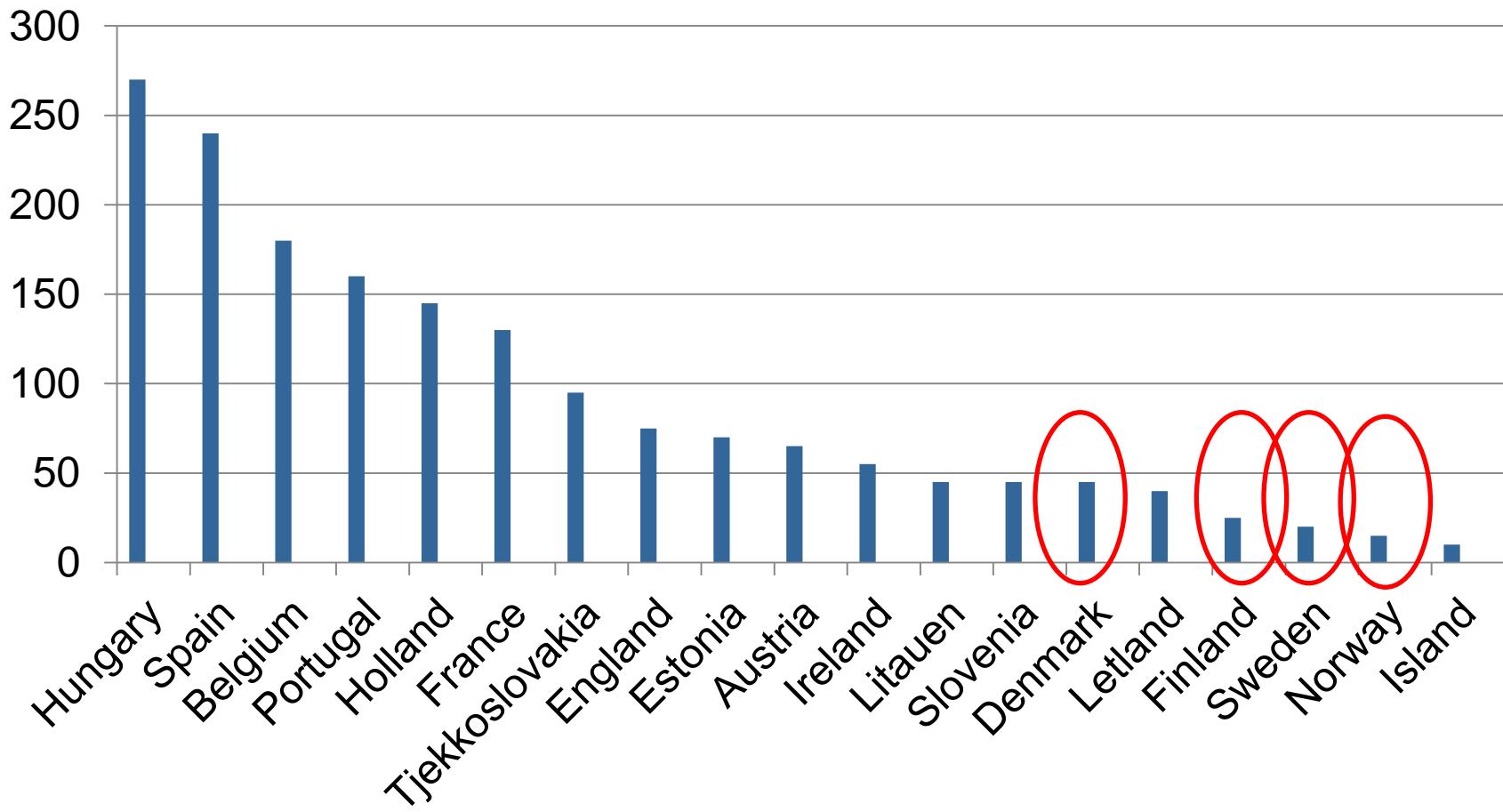
DVM, Ph.D., dipl. ECPHM

KOL Manager/Swine

2010: Total sale of veterinary medicine in 19 European countries



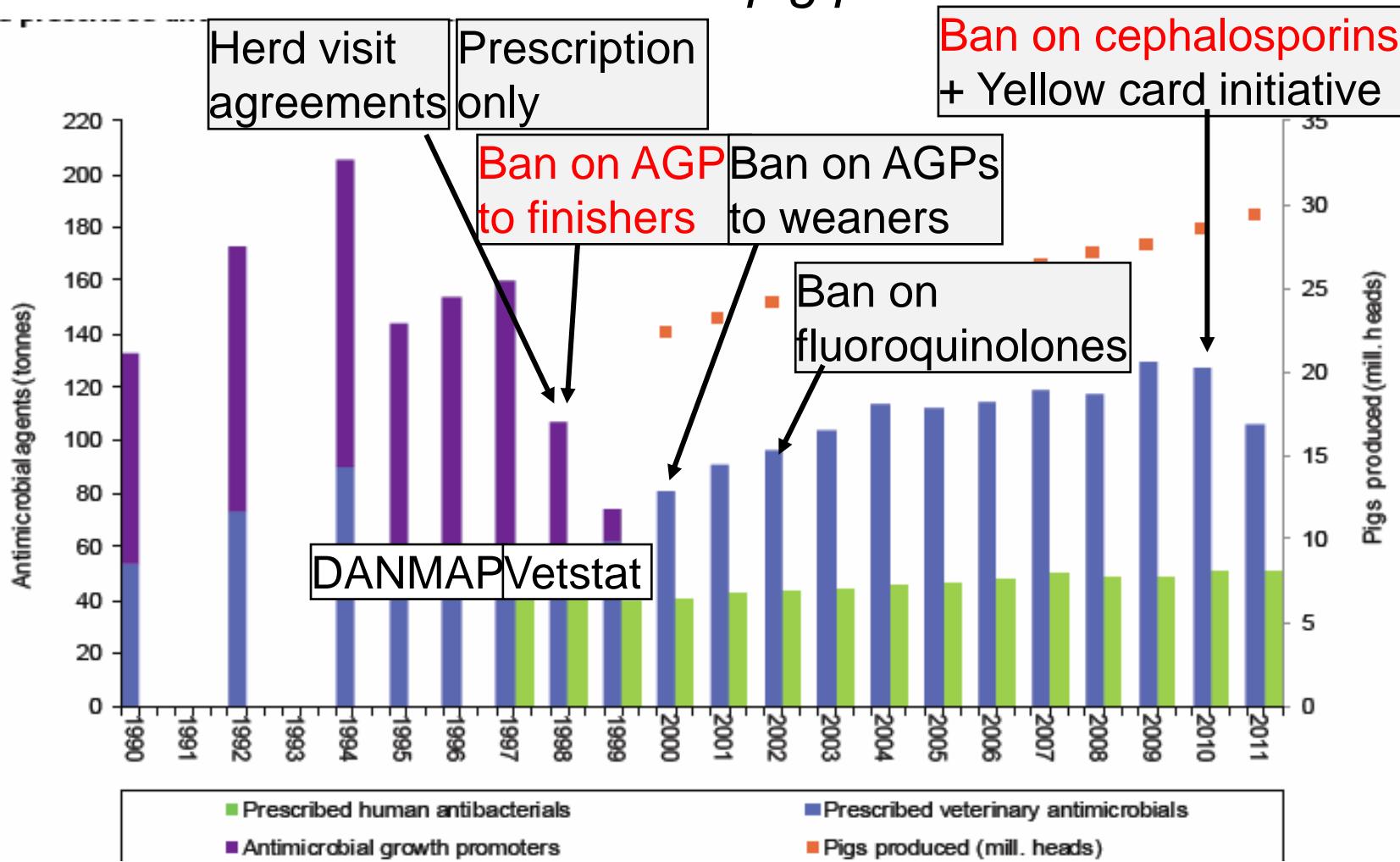
mg/PCU



Events over time in Denmark

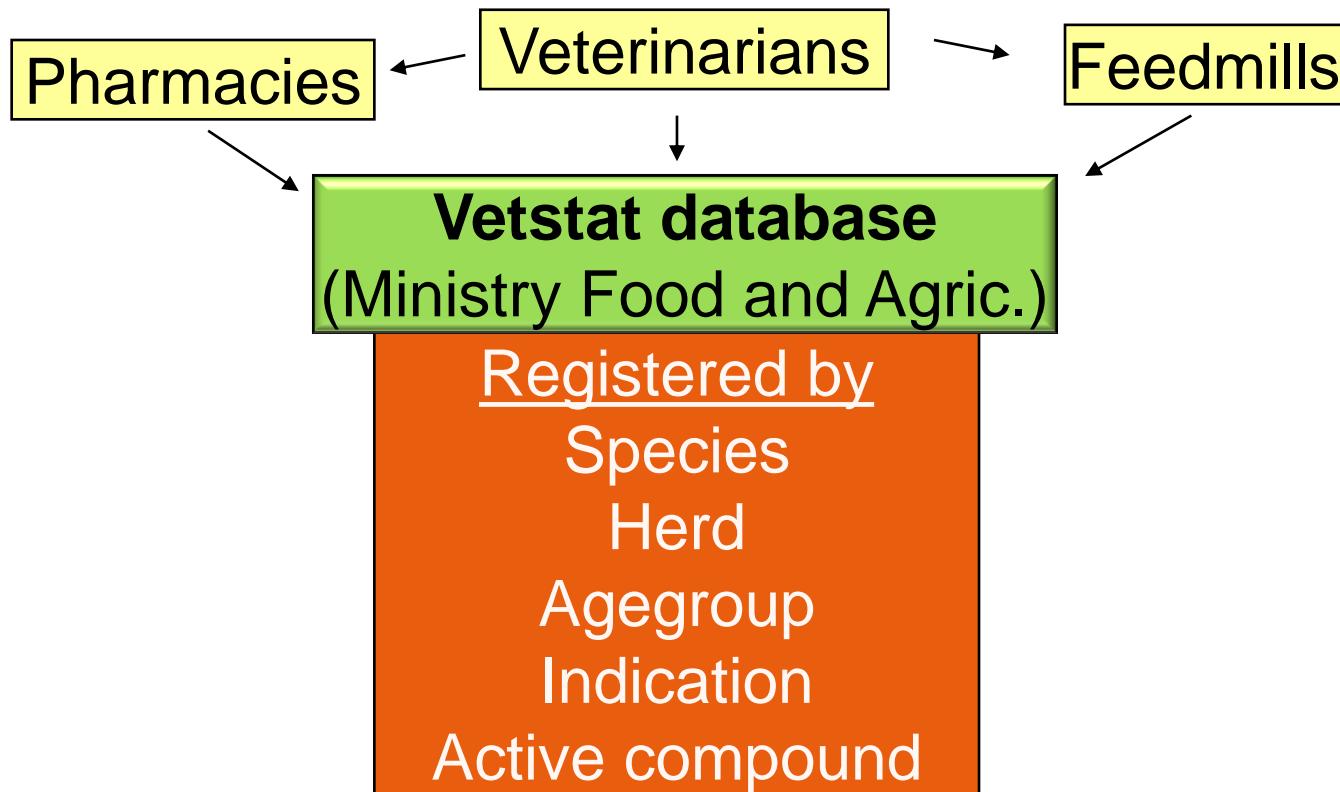
Antibiotic use is for all livestock,

80 % are used in the pig production



Vetstat - Database

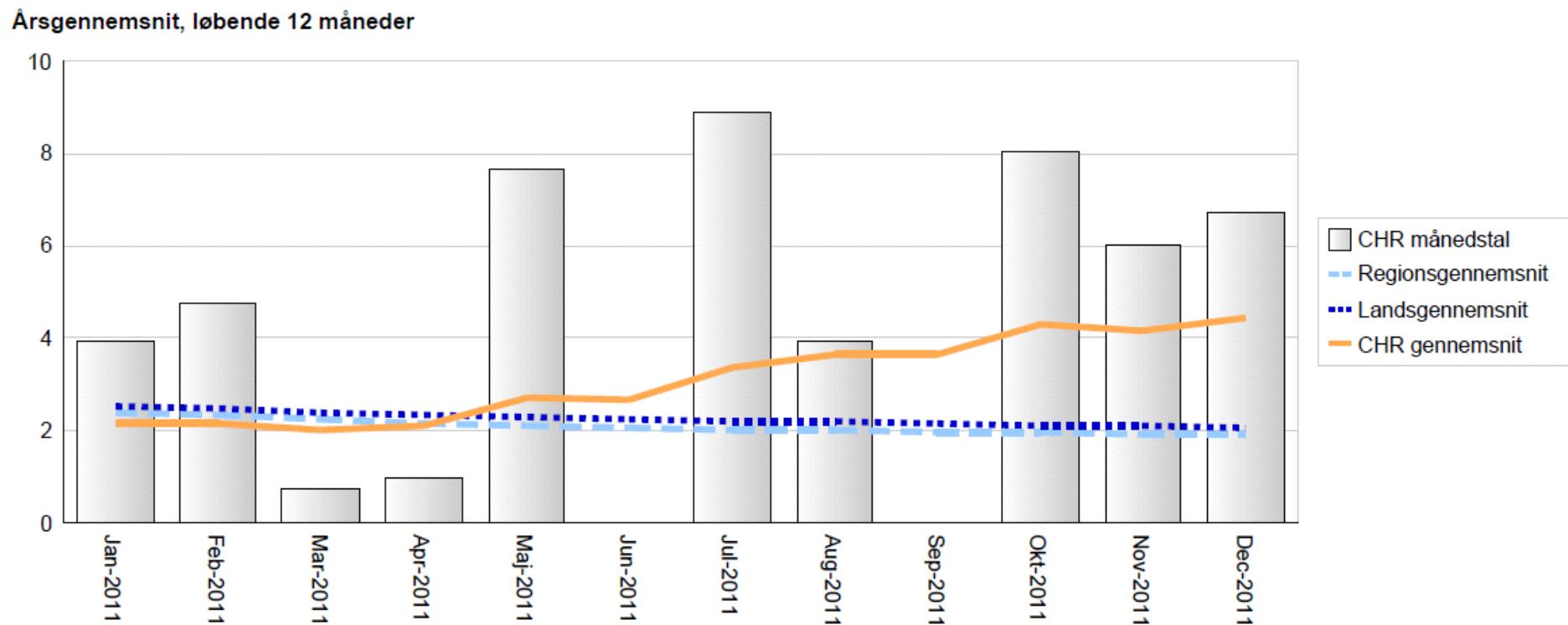
Veterinary use of antimicrobials



Summarized as **ADD** pr. 100 animals pr. day
 $28 \text{ ADD} \sim 28\% \text{ } animals \text{ treated}$

The herd's consumption can be followed closely

Example from www.vetstat.dk (code needed):



Herds consumption can be followed closely on indication and active compound



Boehringer
Ingelheim

ADD pr. 100 dyr pr. dag pr. antibiotikagruppe

From 2009 to 2008 **11.5 % increase in consumption**

2010 -Yellow card scheme
We must decrease usage!



Threshold limits for antimicrobial use...

Yearly new lower permit limits

	Year	Sows	Weaners	Finishers
ADD pr. 100 animals pr. day	2010 - 2012	5,2	28	8
	2013	5	25	7



Yellow card – what then?

Charged supervision
and charged enforcement
orders/bans

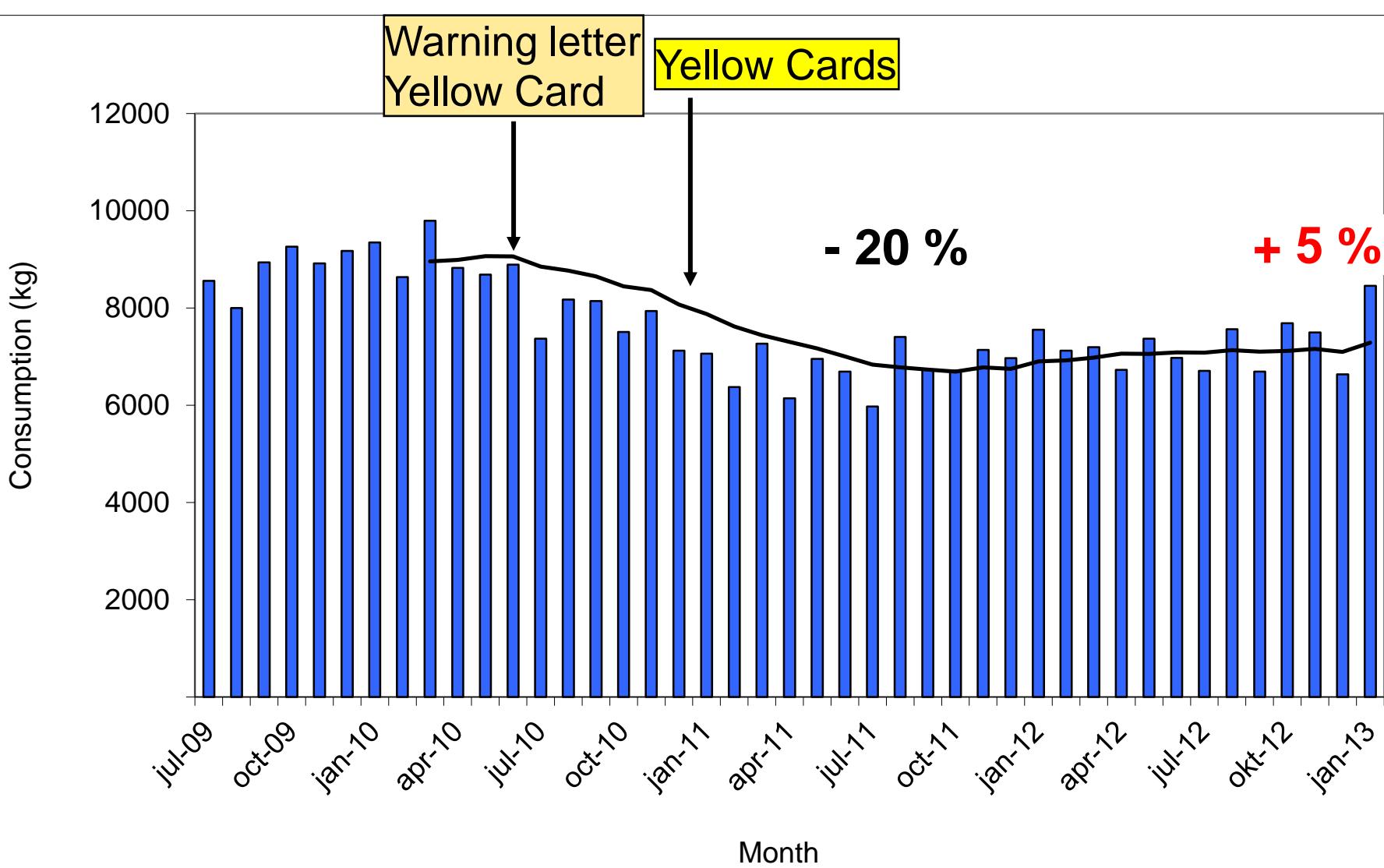


9 months
Yellow Card
Restrictions on
water/feed medication
Inspection

5 months
Tightened
supervision
2. Opinion
vet
Actionplan

Until below
threshold
Red card
Eg. reduced
stocking
rate

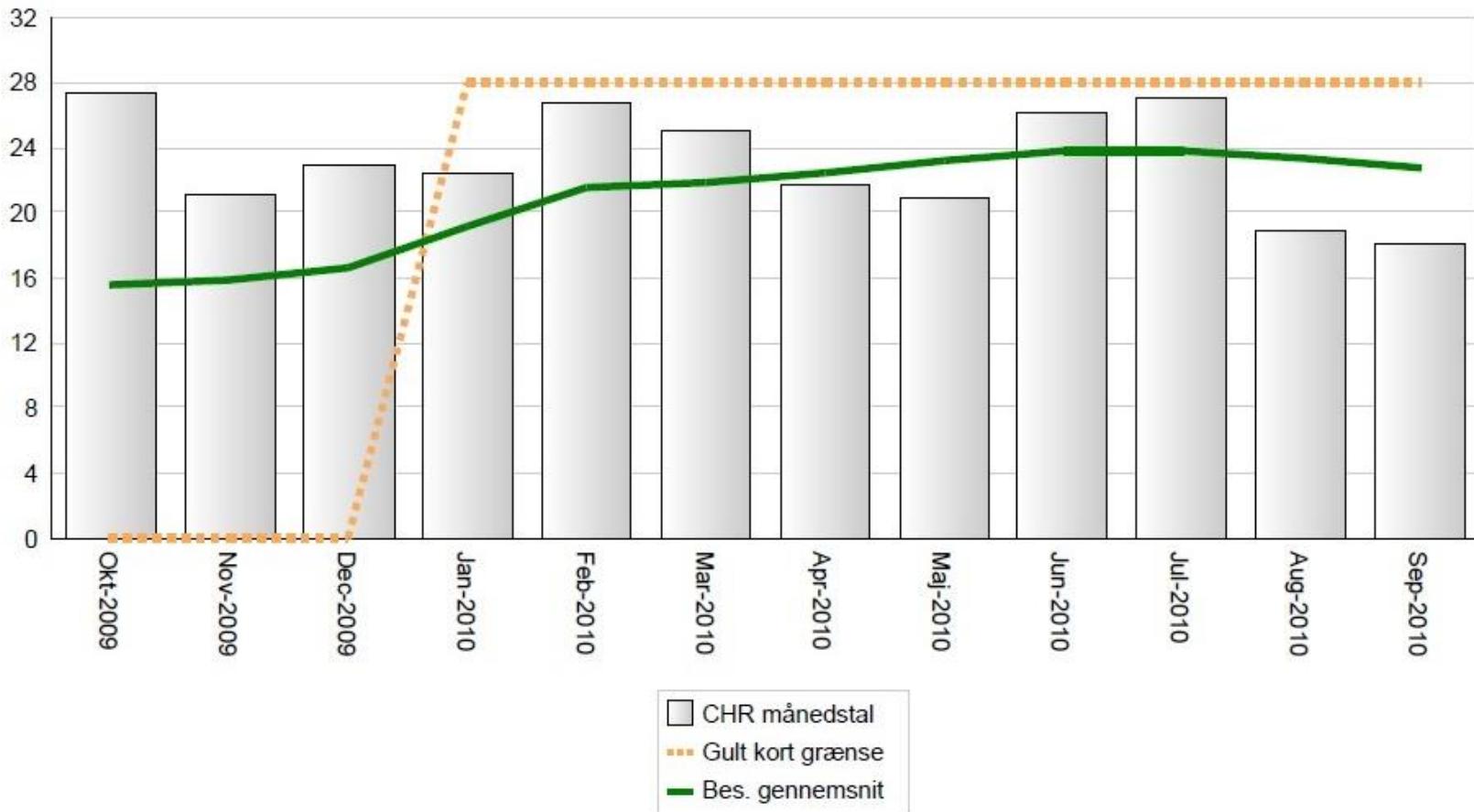
The Yellow Card effect



The herds consumption can be followed closely by farmer and consultants

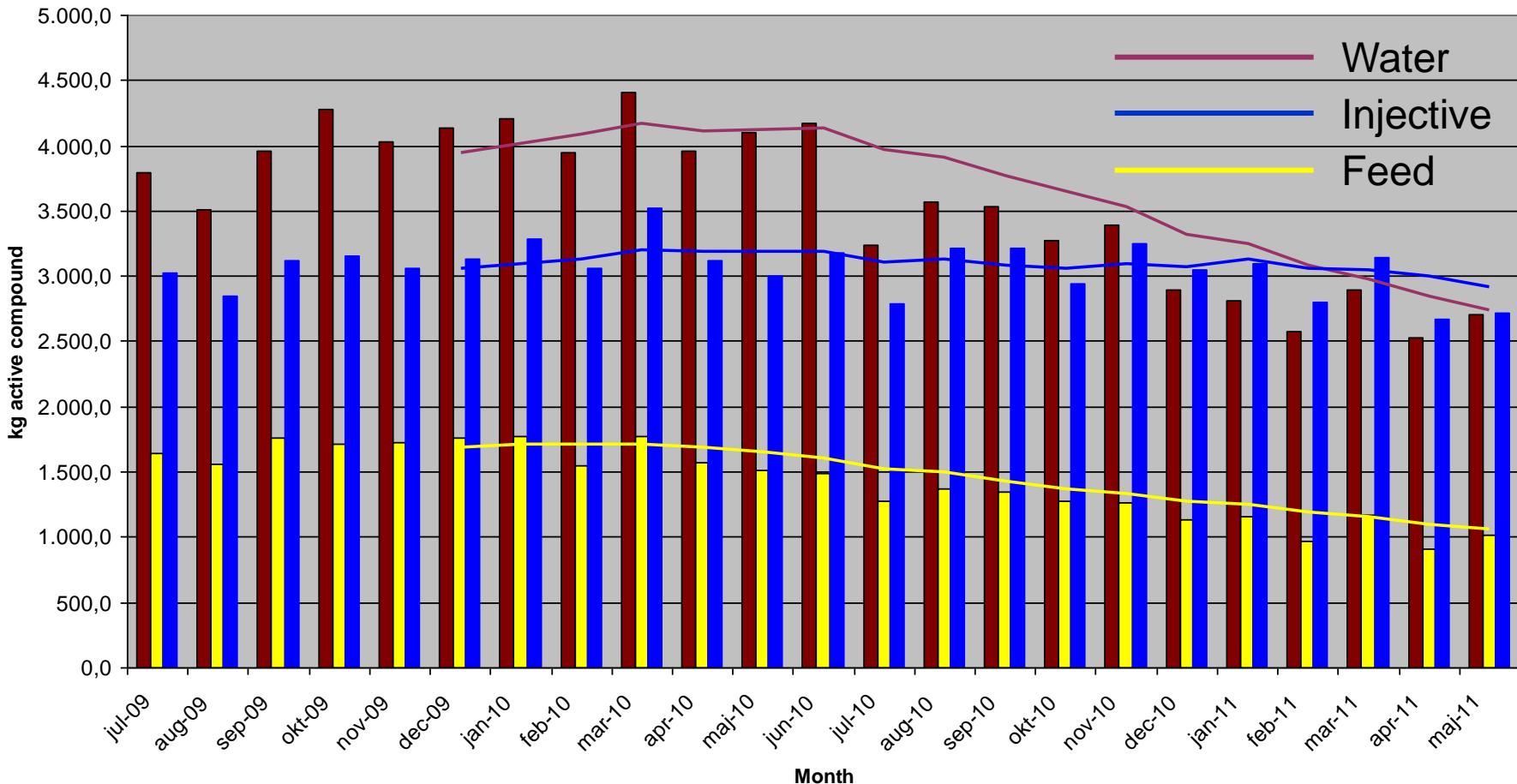
Example from www.vetstat.dk (code needed):

FVST's grænseværdi, løbende 9 måneder



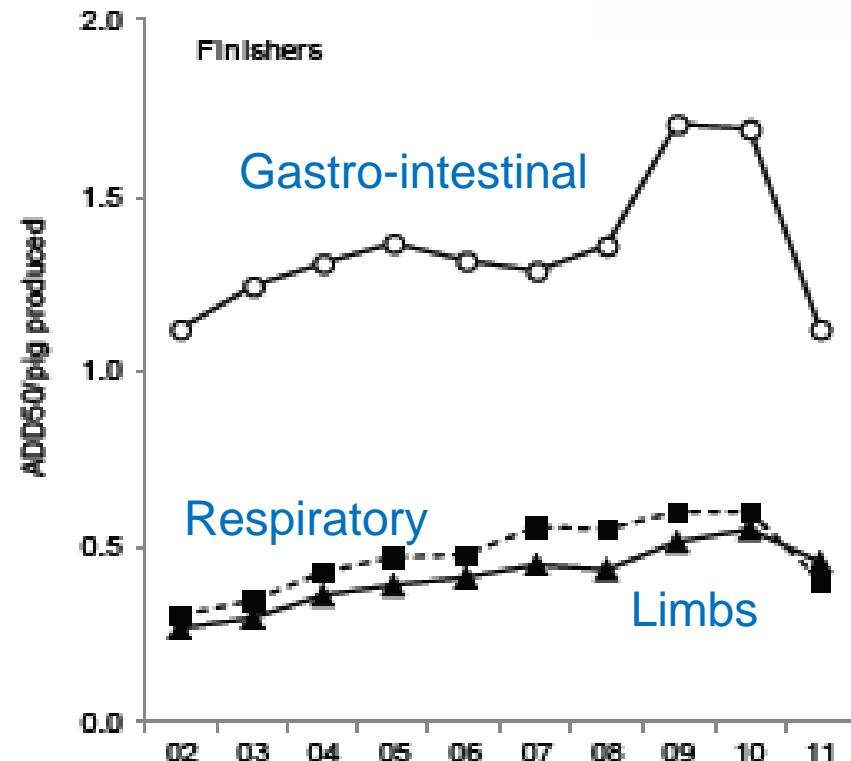
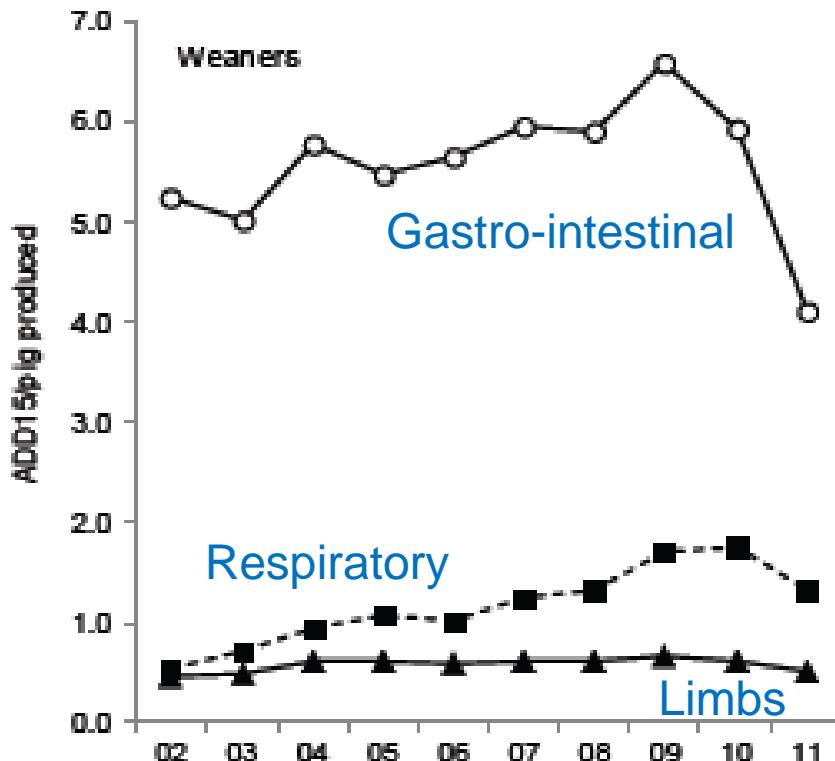
Paradigme shift

More prudent use of antimicrobials



Reduction especially in gastro-intestinal diseases (diarrhoea) (Lawsonia and E. coli)

DANMAP 2011



--♦-- Urogenital system

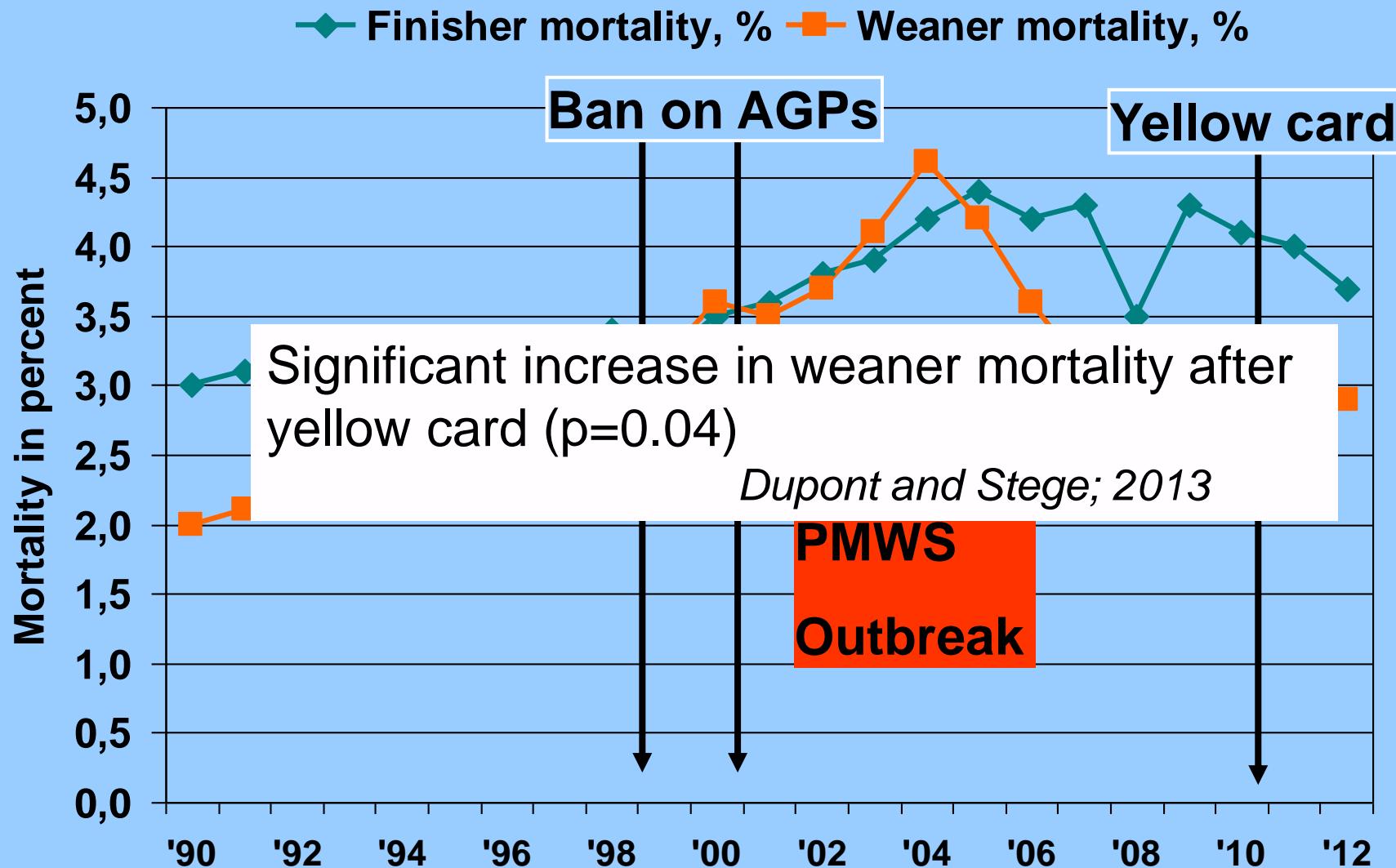
--■-- Respiratory tract

* Udder

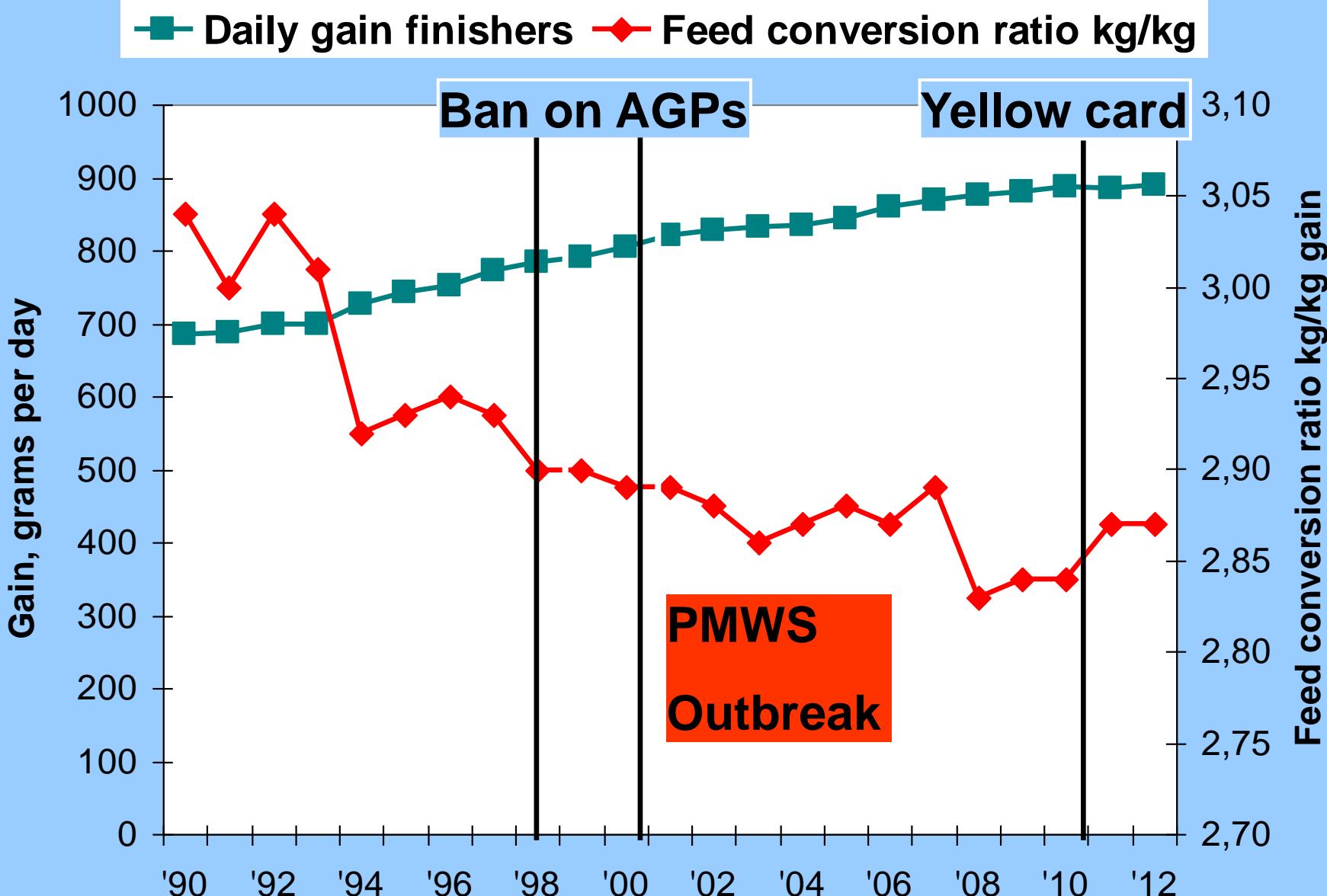
▲ Limbs/joints/CNS/skin

—○— Gastrointestinal system

Impact on health - Mortality



Impact on health – Productivity finishers

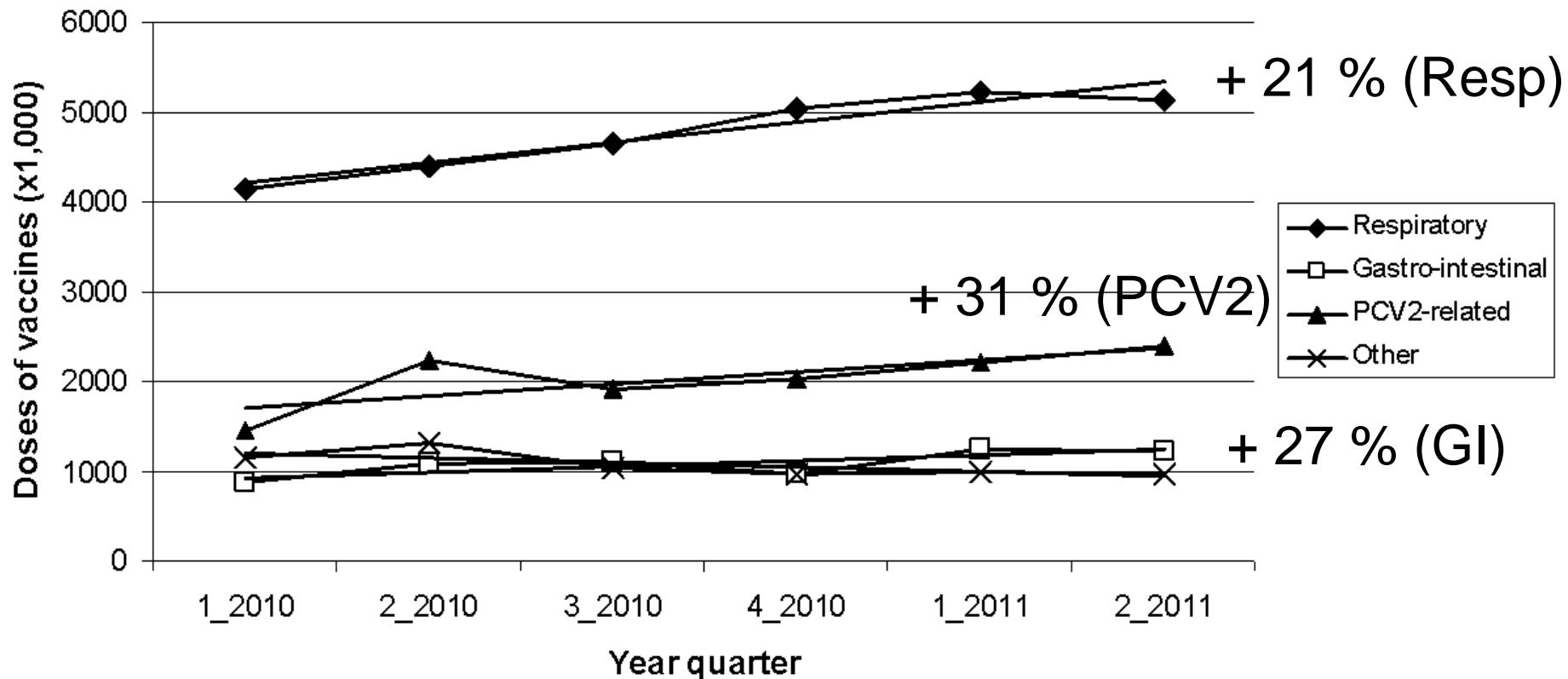


Win-win situation

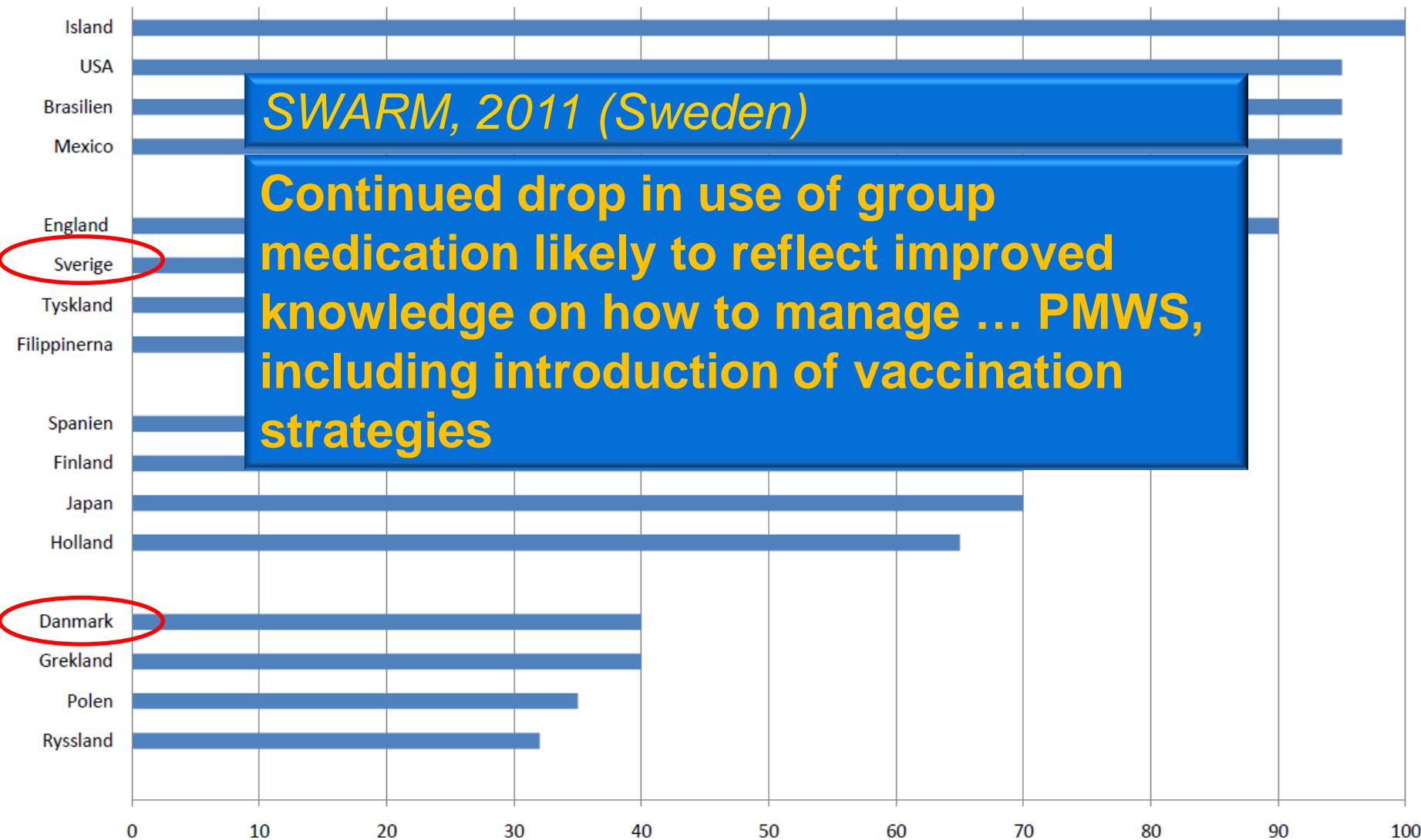
- How can you improve production results and at the same time reduce the use of antimicrobials?

Paradigme shift

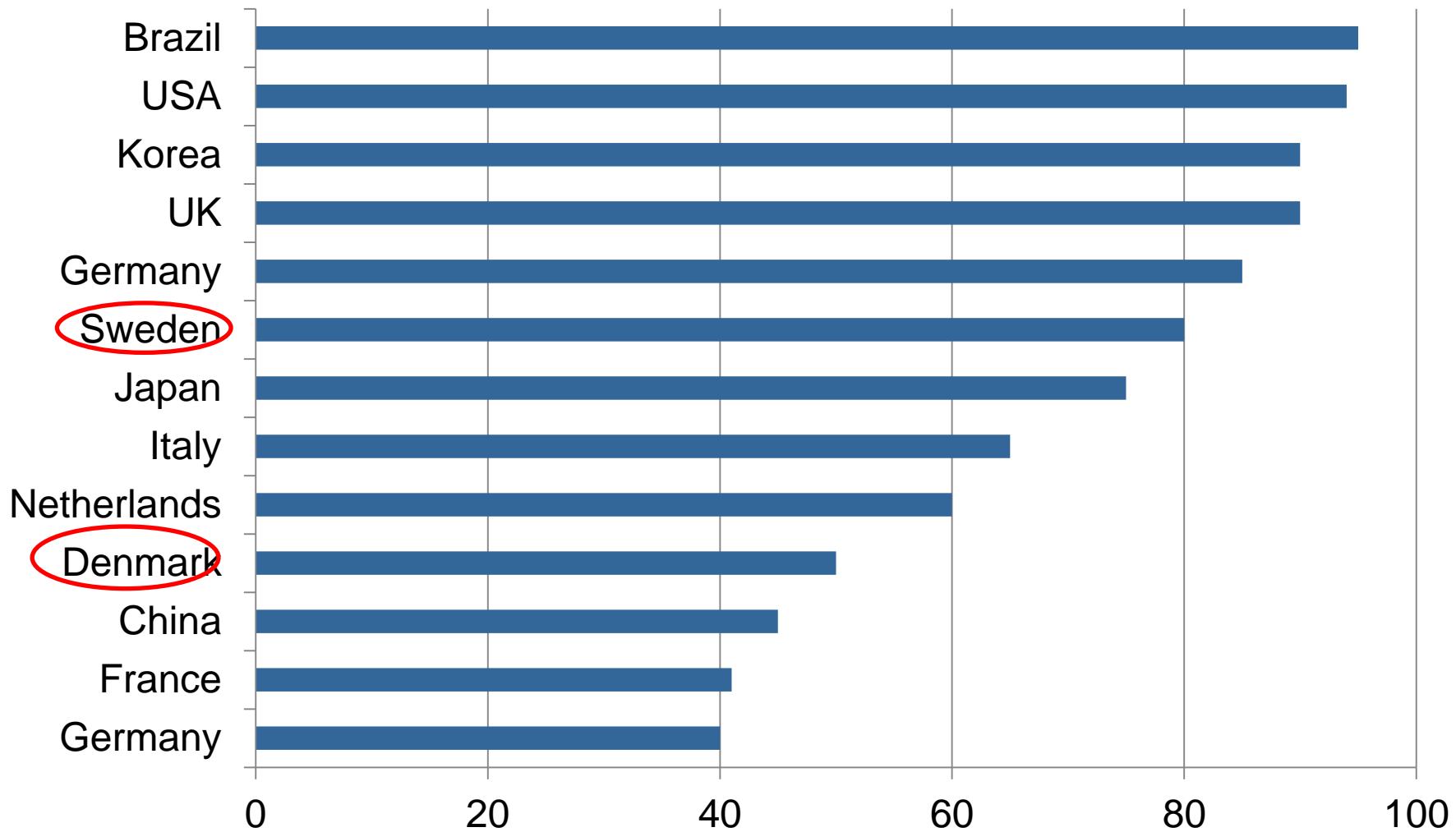
Use of vaccines increased slightly



Vaccination rates - Circovirus



Vaccination rates - Mycoplasma

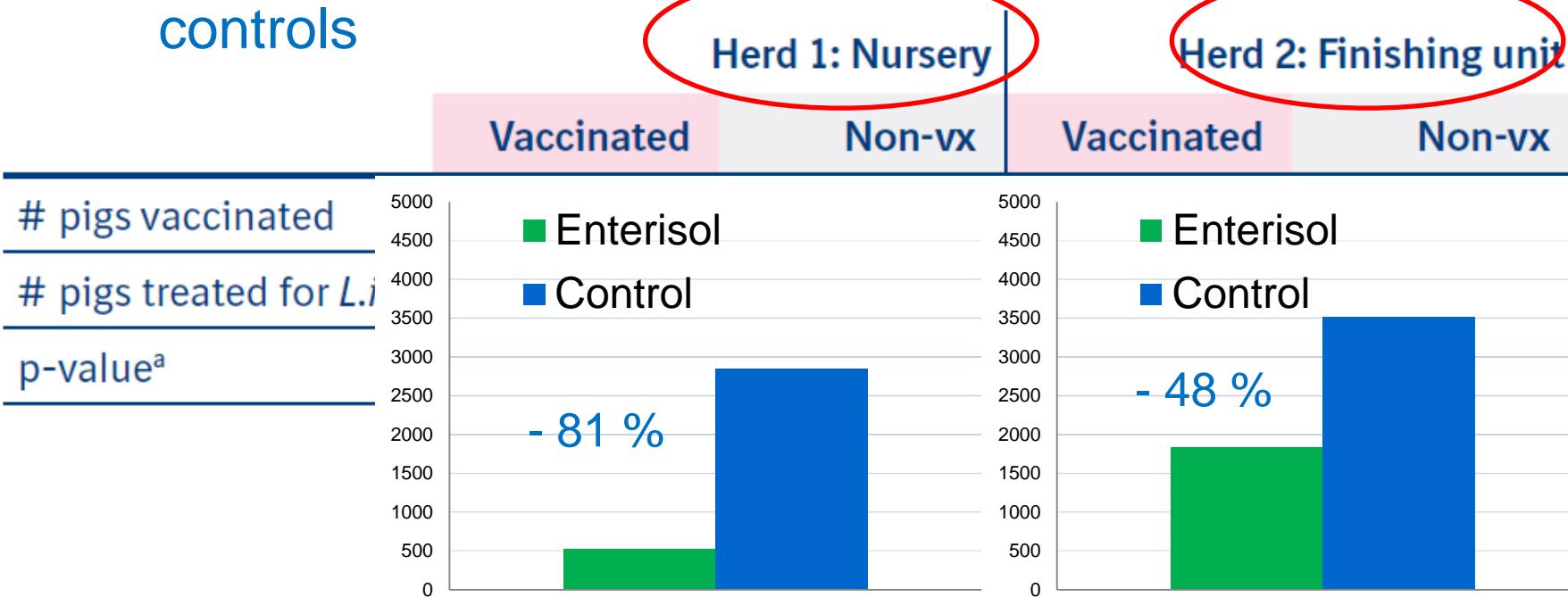


Lawsonia vaccination of weaners or finishers

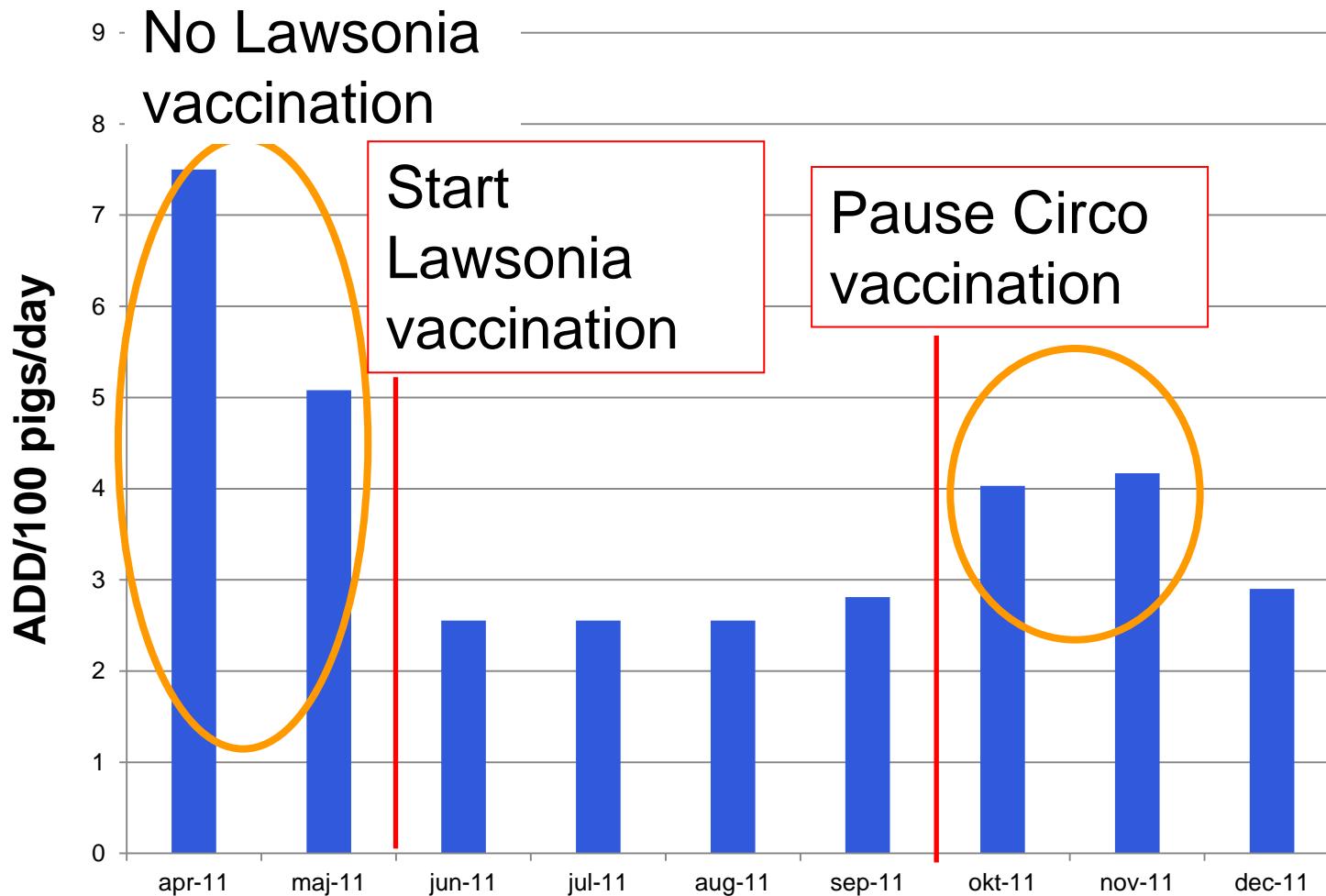
- Reduced antibiotic use



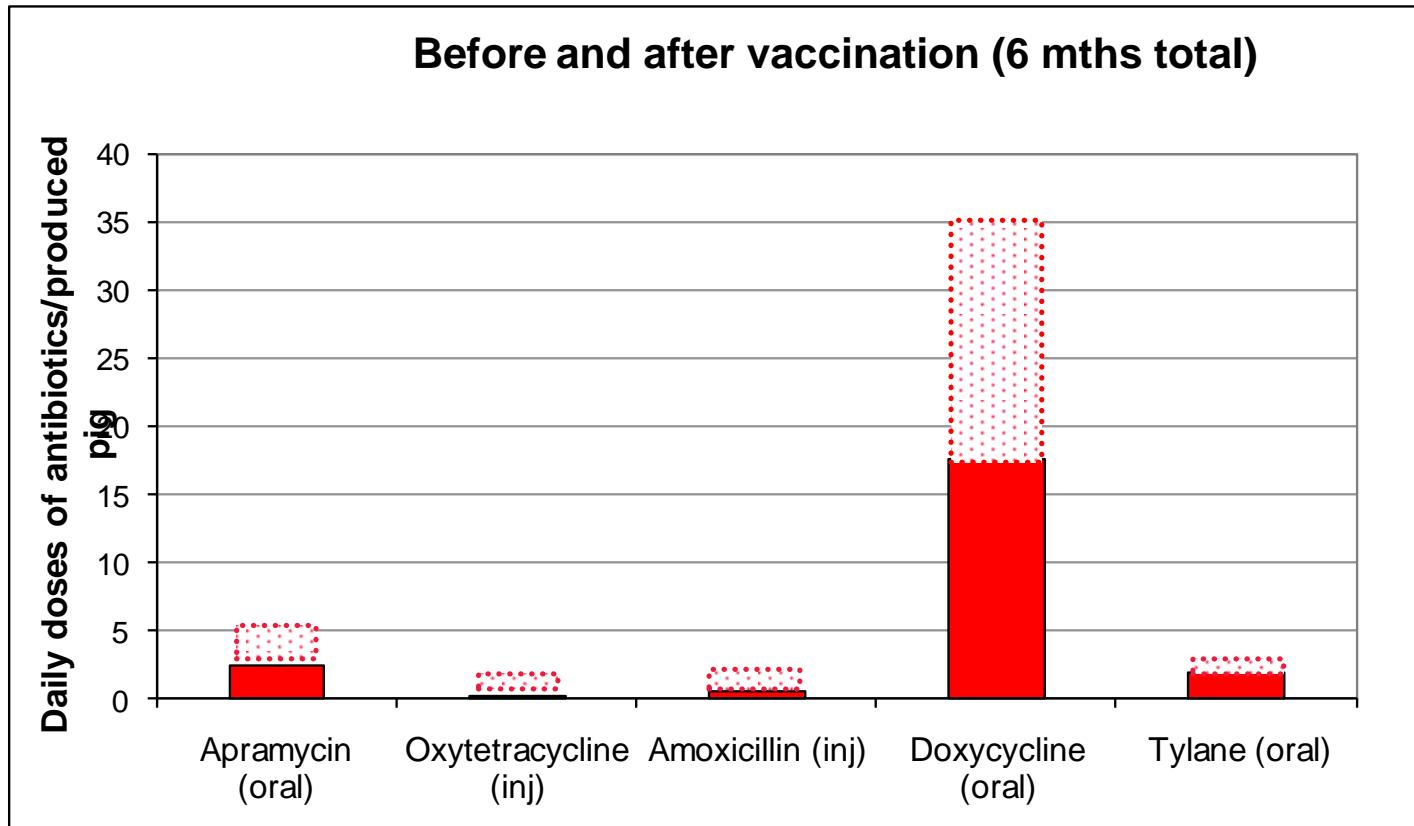
- Vaccination trials, 2 herds
- Every second batch vaccinated; remaining were controls



Vaccination pause – Increases treatments



Less use of antibiotics for weaners post vaccination against Lawsonia and Circovirus



Number of daily doses reduced with 39%

Havn et al., Safepork 2011

Paradigme shift

- Prevention rather than Cure

Vaccination



Management



With
you
all the
way



Taking prevention seriously

