

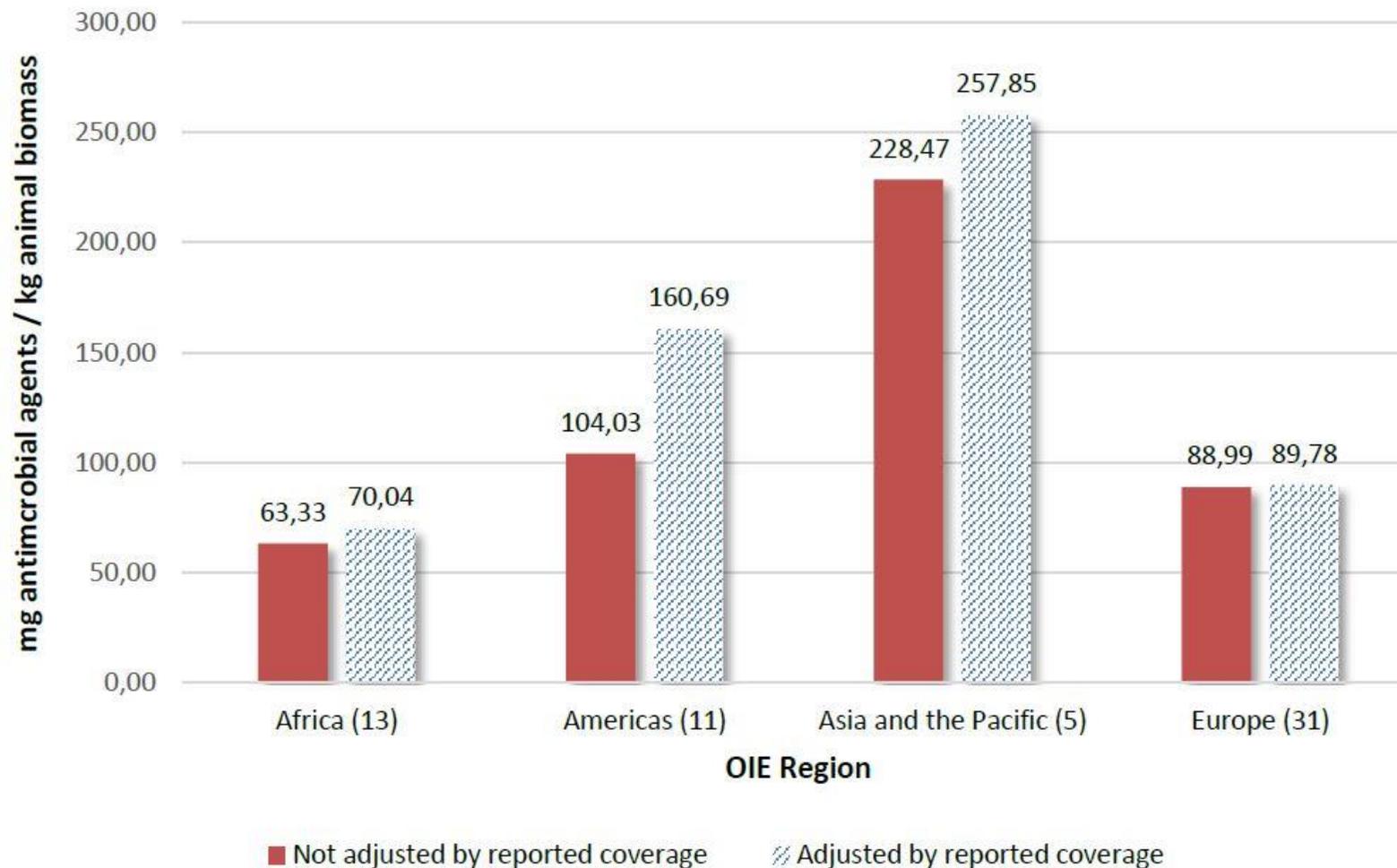
HEALTHY ANIMALS DO NOT NEED ANTIBIOTICS

Christina Greko
National veterinary institute

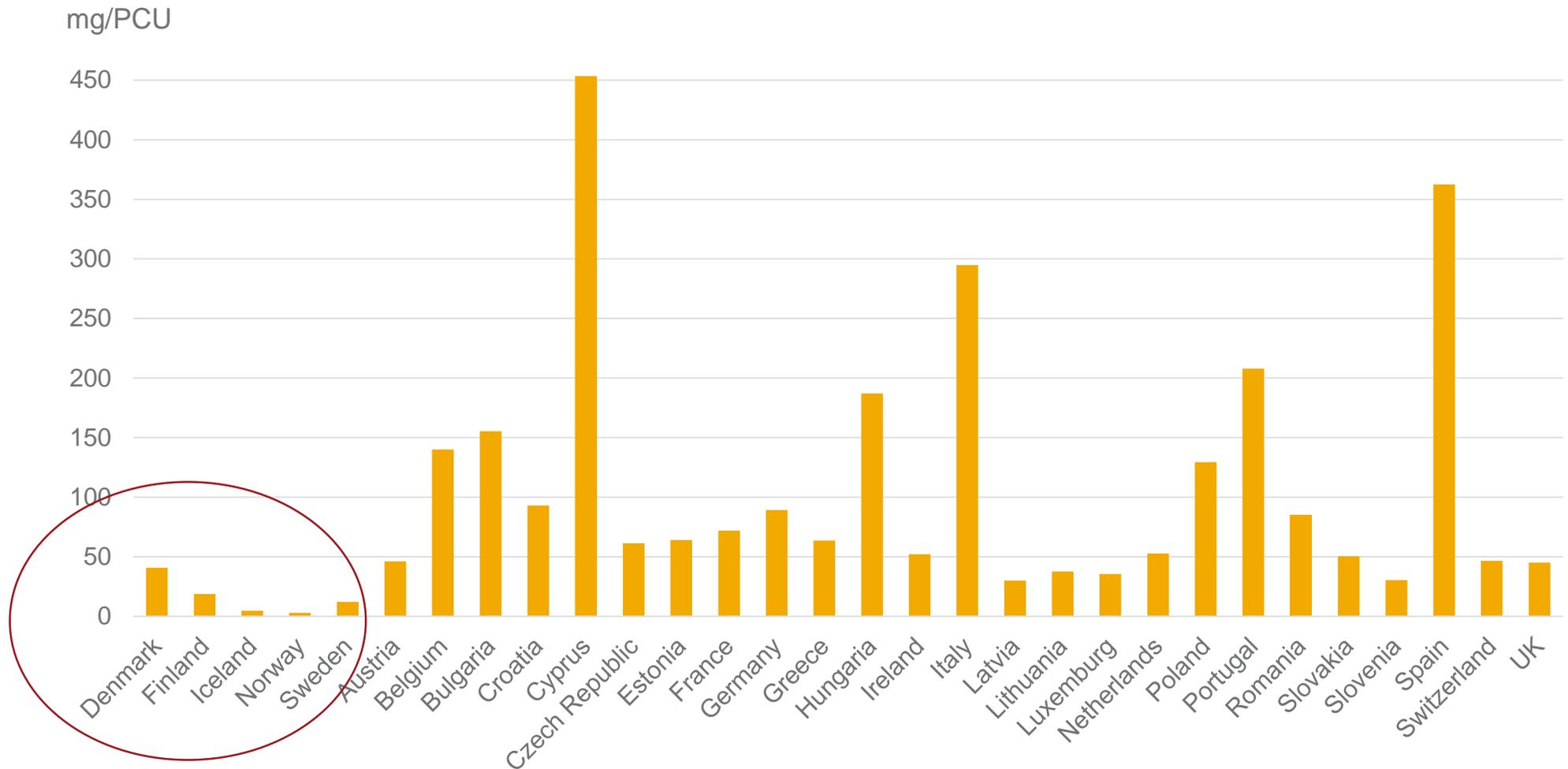
**... but when they are sick
they need treatment**

SALES OF ANTIBIOTICS FOR ANIMALS – REPORTS TO OIE (WORLD ORGANISATION FOR ANIMAL HEALTH)

Figure 30. Quantities of Antimicrobial Agents Intended for Use in Animals Adjusted for Animal Biomass, 2014 Regional Comparison (mg/kg)



SALES OF ANTIBIOTICS FOR ANIMALS IN EUROPEAN COUNTRIES



Note: the measure is blunt and data should be interpreted with caution
ESVAC 8th report, www.ema.europa.eu

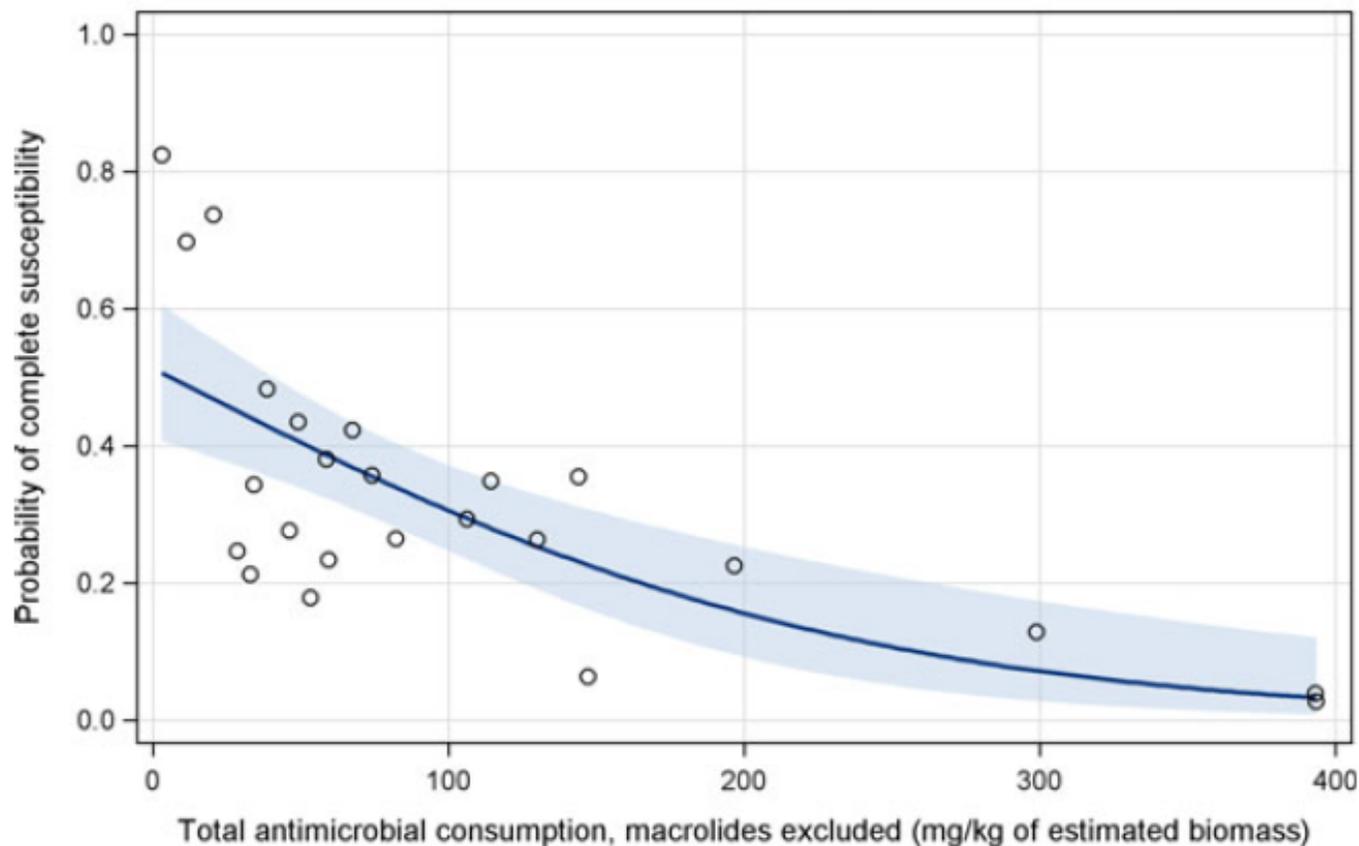
PROPORTION *E.coli* SUSCEPTIBLE TO ALL TESTED ANTIBIOTICS (CHICKENS 2016)



Figure 91: Spatial distribution of complete susceptibility to the panel of antimicrobials tested among indicator *Escherichia coli* from broilers, using harmonised ECOFFs, 30 EU/EEA Member States, 2016

CORRELATION BTW SALES OF ANTIBIOTICS FOR ANIMALS AND PROPORTION SUSCEPTIBLE TO ALL 11 TESTED ANTIBIOTICS”

2) Probability of complete susceptibility – 2014–2015



WHAT NEEDS TO BE DONE, MOSTLY EVERY DAY

Remove routine use

= growth promoters, routine prophylaxis

Minimise need

= infection control

= biosecurity

= keep animals healthy and "resilient"

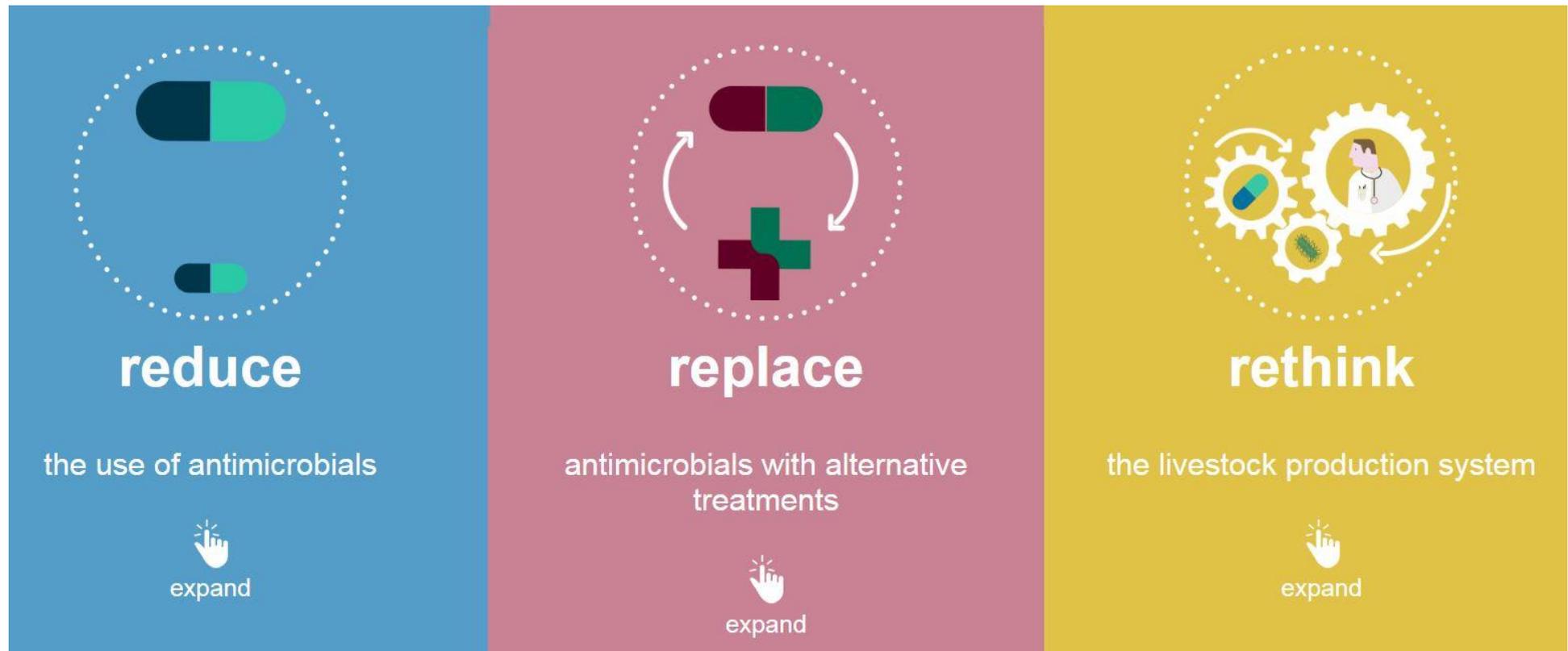
Optimise use when needed

= diagnosis, correct selection & dose

Monitor

= use and resistance

"RONAFA"-REPORT (EFSA-EMA, DEC 2016)



...reduce the need to use antimicrobial agents in animal husbandry in the European Union.... 245 pages.

<https://www.efsa.europa.eu/en/press/news/170124-0>

REDUCING THE NEED: CONTROL AND ERADICATION (EXAMPLES)

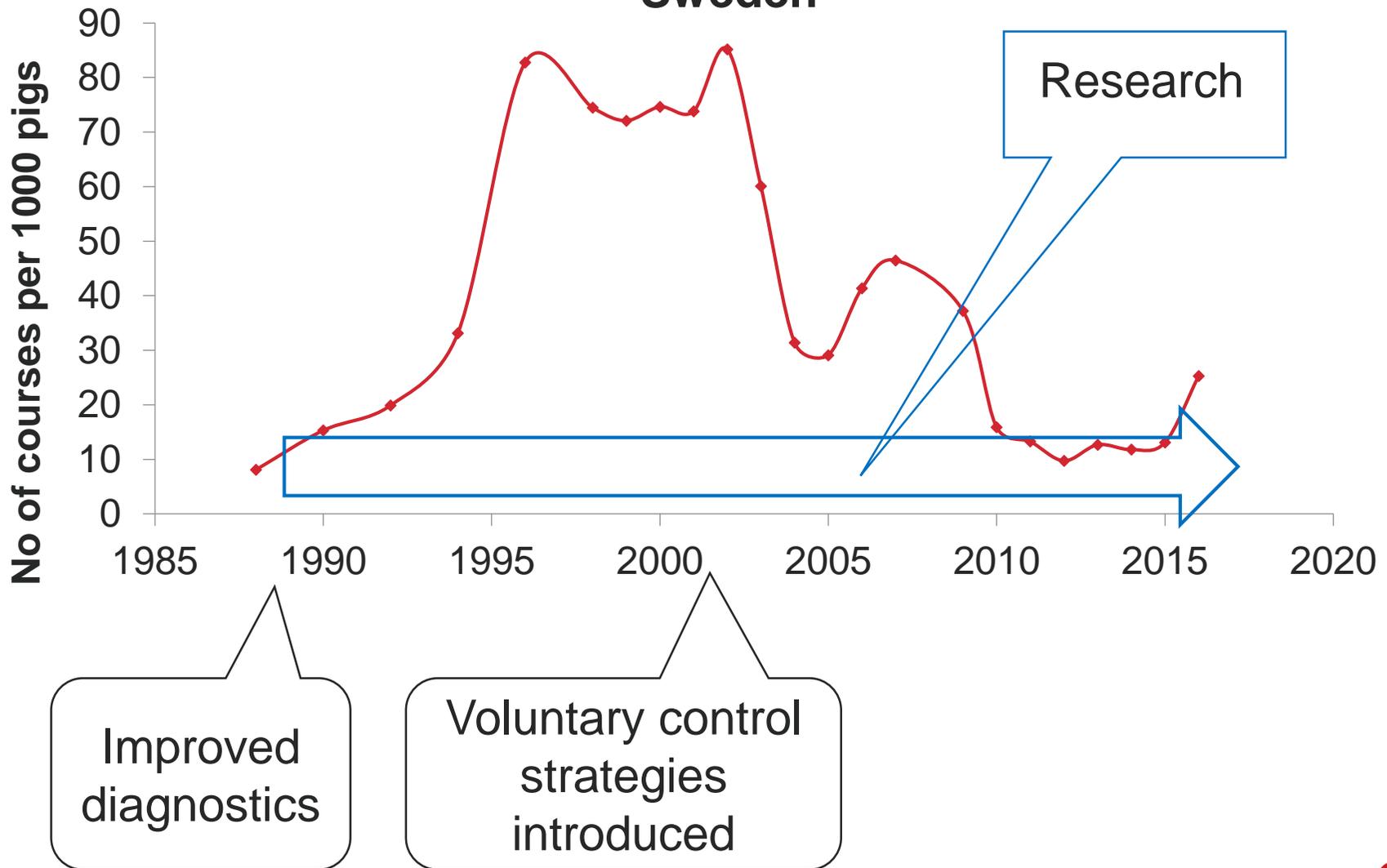
- Viral diseases, examples
 - BVDV
 - IBR
 - PRRS
 - AD
- Zoonoses
 - Salmonella
 - Campylobacter



- Biosecurity is introduced at farm level
- Predisposing factor for bacterial diseases removed

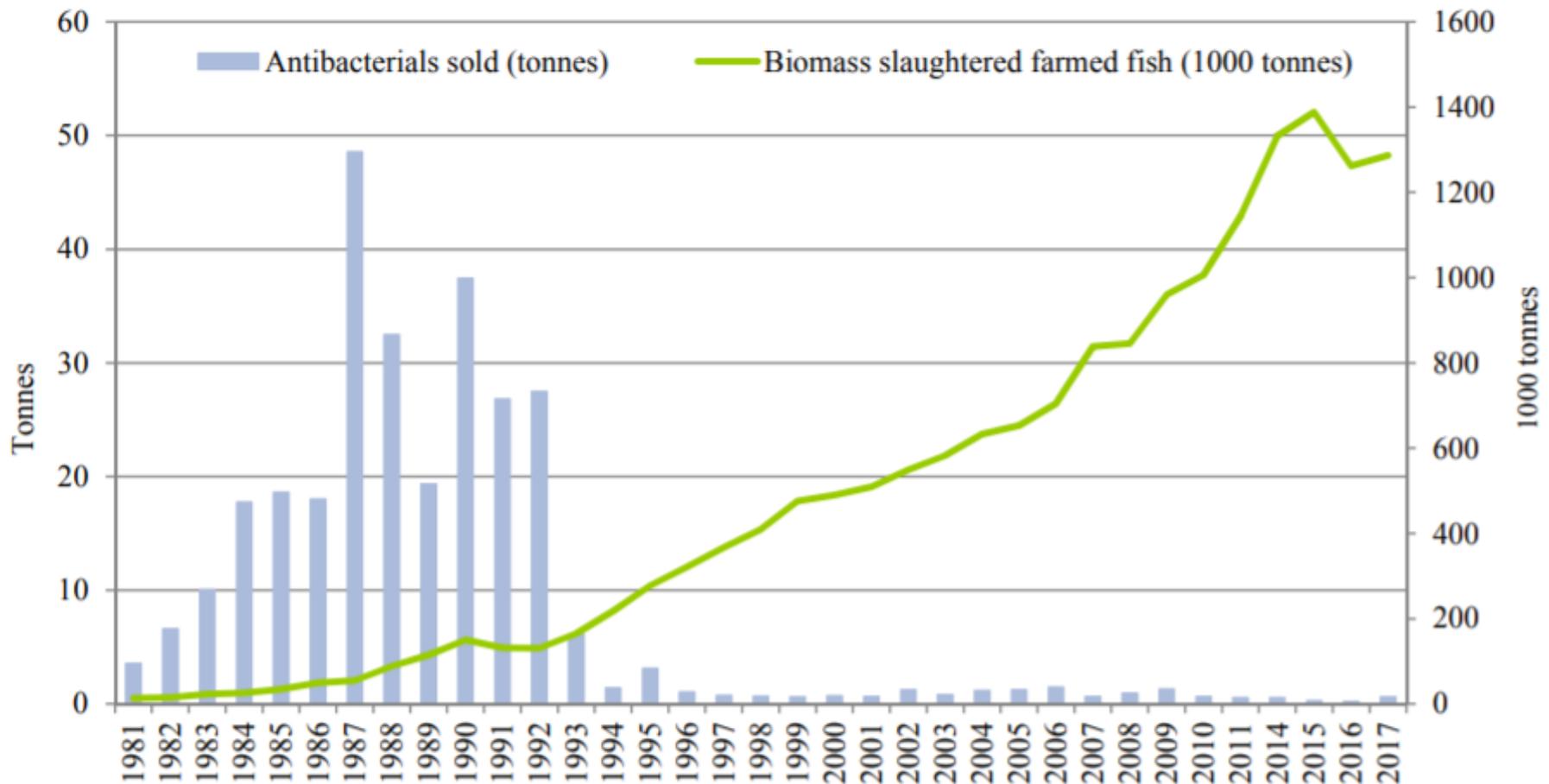
REDUCING THE NEED: CONTROL OF SWINE DYSENTERY FIRST CHOICE FOR TREATMENT: PLEUROMUTILINS

Sales of pleuromutilins for group medication, Sweden



REDUCING THE NEED: VACCINATION AND BIOSECURITY

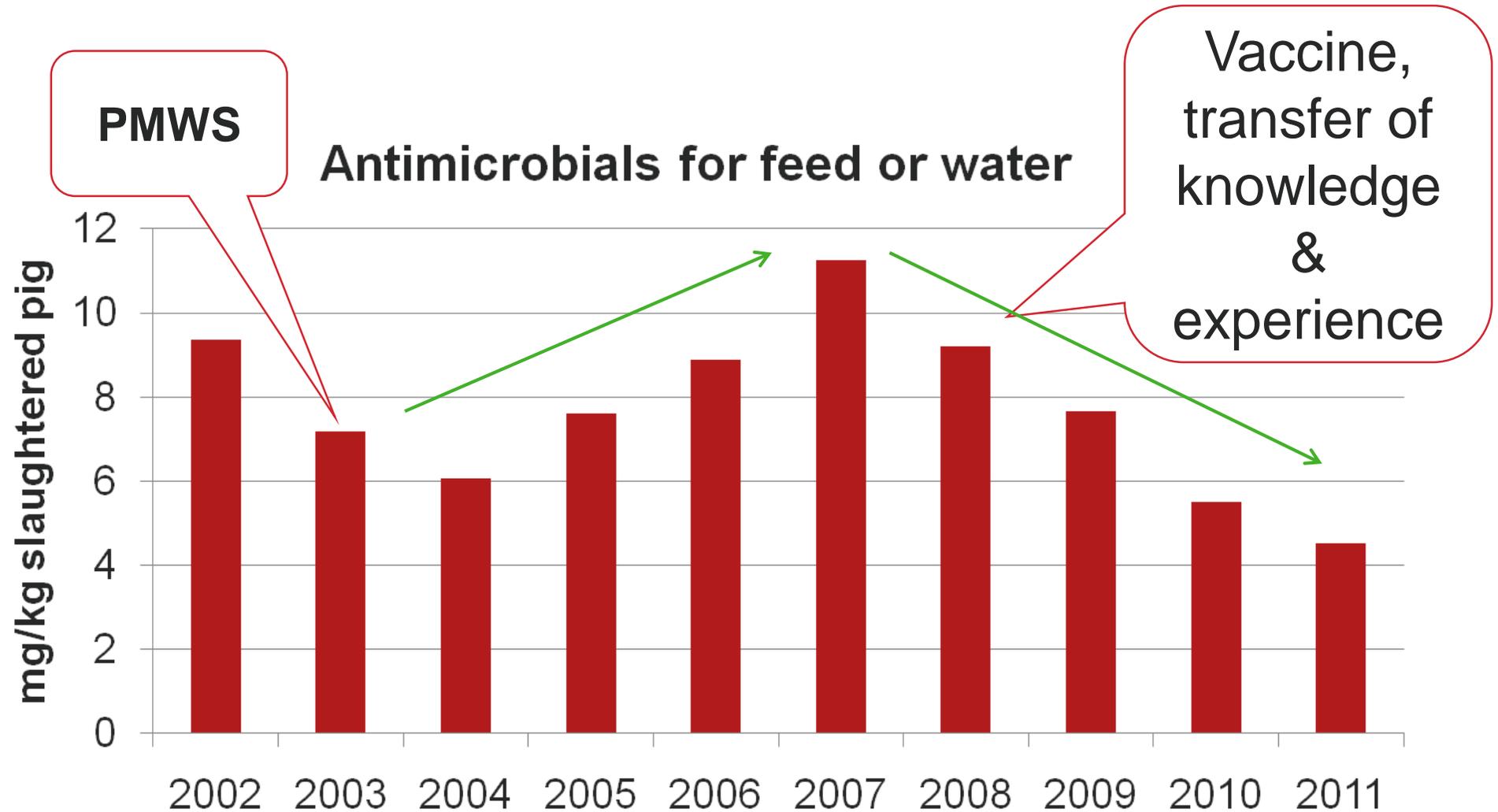
Total sales for fish (tonnes) & biomass slaughtered, NO



Source: NORM-VET 2017



CRITICAL FACTORS: INTRODUCTION OF NEW DISEASES (SE)



Source: Svarm 2011, www.sva.se

HEALTHY AND RESILIENT ANIMALS

- Husbandry
- Environment
- Nutrition
- Lack of stress
- Genetics
- ...

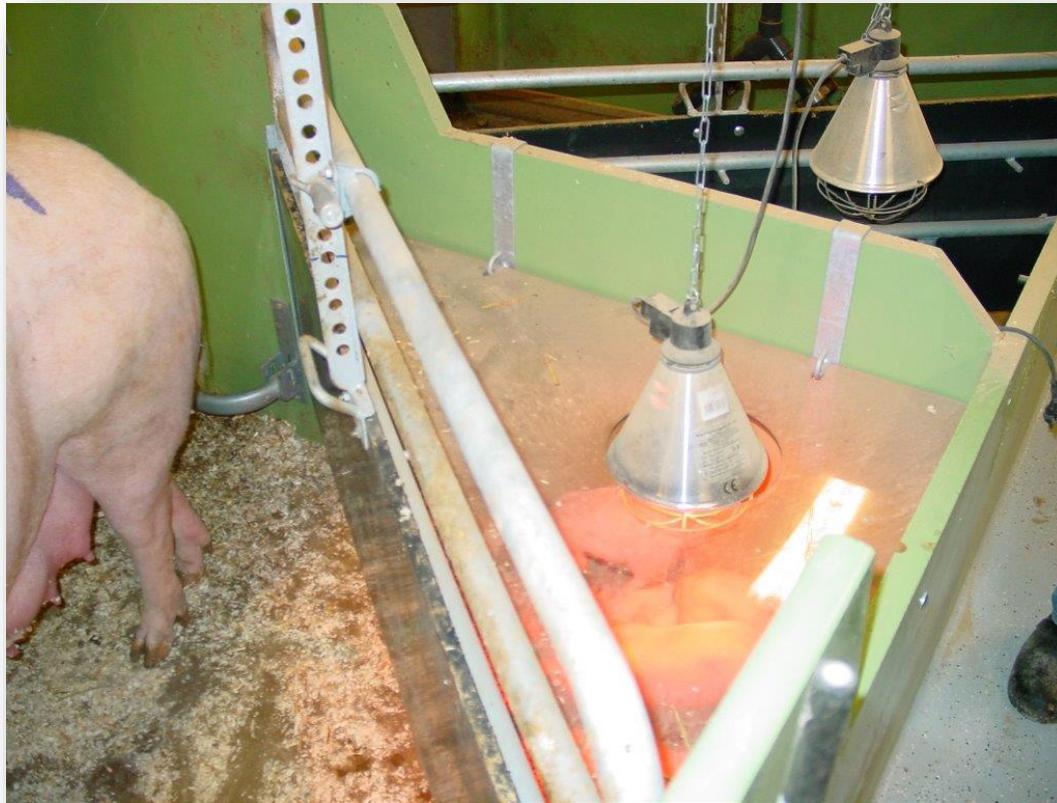
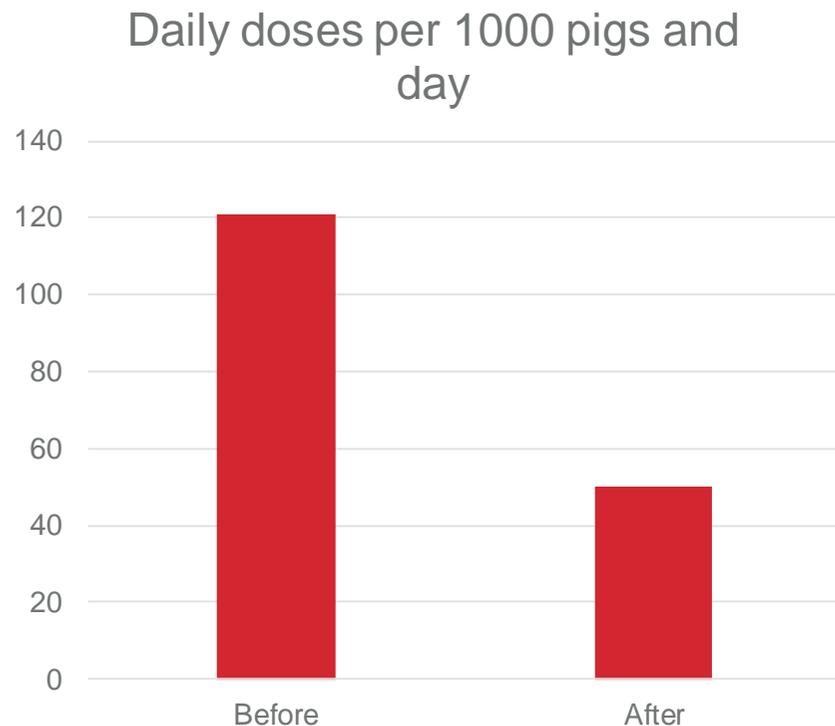


Photo: Marie Sjölund

EFFECT OF HERD HEALTH ADVICE, PIG PRODUCTION BELGIUM



- No negative impact on production
- +2.67 Euro per pig

REDUCING THE NEED: FROM TREATMENT TO PREVENTION



Photo Marie Sjölund, SVA



Photo Magnus Aronson

SUCCESS FACTORS FOR CONTINUOUS IMPROVEMENT



- Consensus
- Collaboration
- Engagement
- Access to data
- Applied knowledge
- Adapted in time



One health

