



SWEDISH STRATEGIES AGAINST ANTIMICROBIAL RESISTANCE – “THE ANIMAL SIDE”

Christina Greko
National veterinary institute



One health



OVERARCHING GOAL OF THE SWEDISH STRATEGY:

Preserve the possibility of effective treatment of bacterial infections in people and animals



Photo SVA, Bengt Ekberg

IT IS NOT ONLY ABOUT PUBLIC HEALTH

Example: multiresistance in
Brachyspira hyodysenteriae

Czech Rep. 2000-2005:

32 farms with "*B. hyo*"

All R against tiamulin & valnemulin

- 3 sensitive to tylosin
- 3 sensitive to doxycyklin

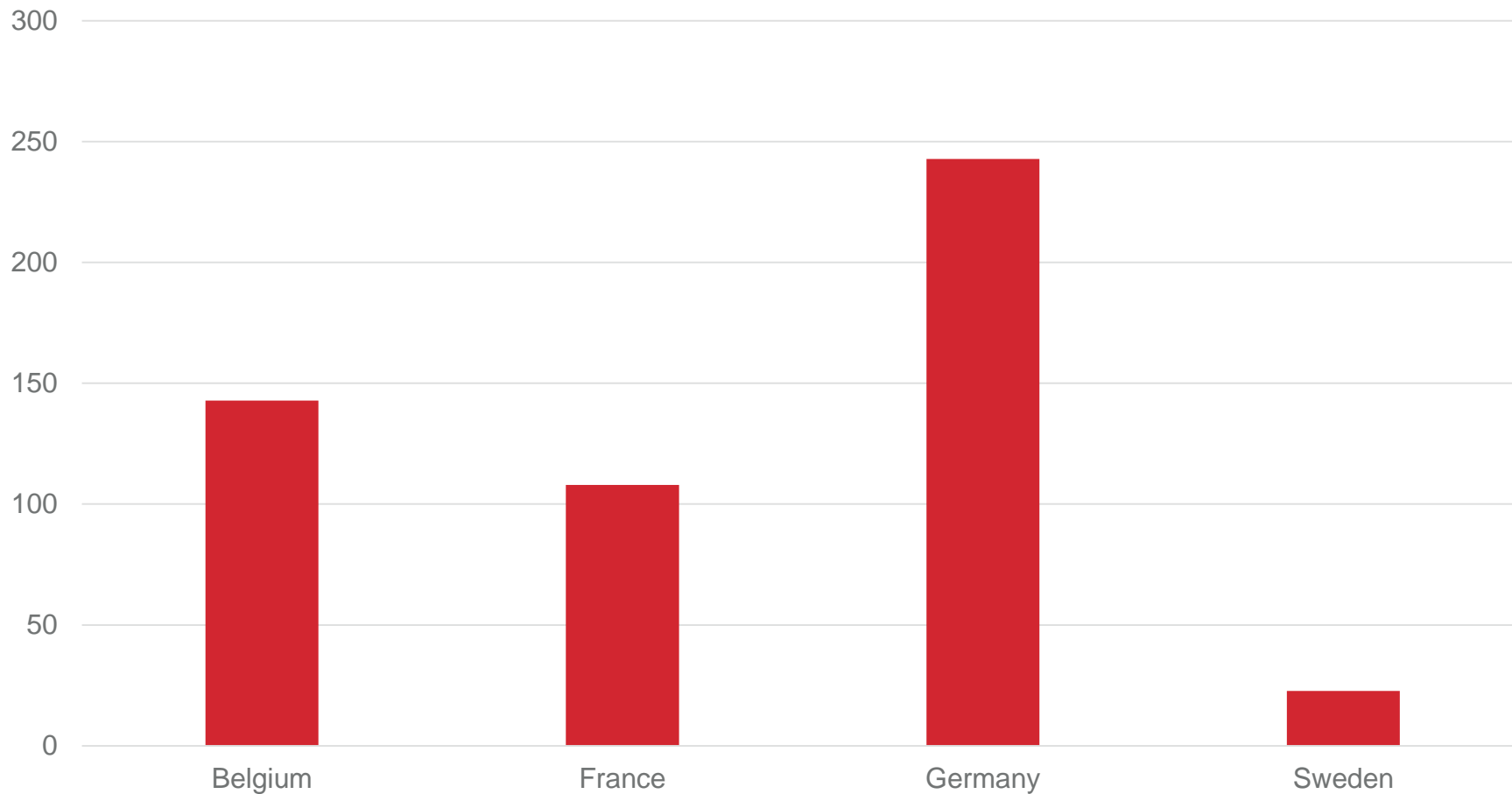


SALES OF ANTIBIOTICS FOR FOOD PRODUCING ANIMALS 2014 (29 COUNTRIES) Average: 152 mg/PCU, Sweden 12 mg/PCU

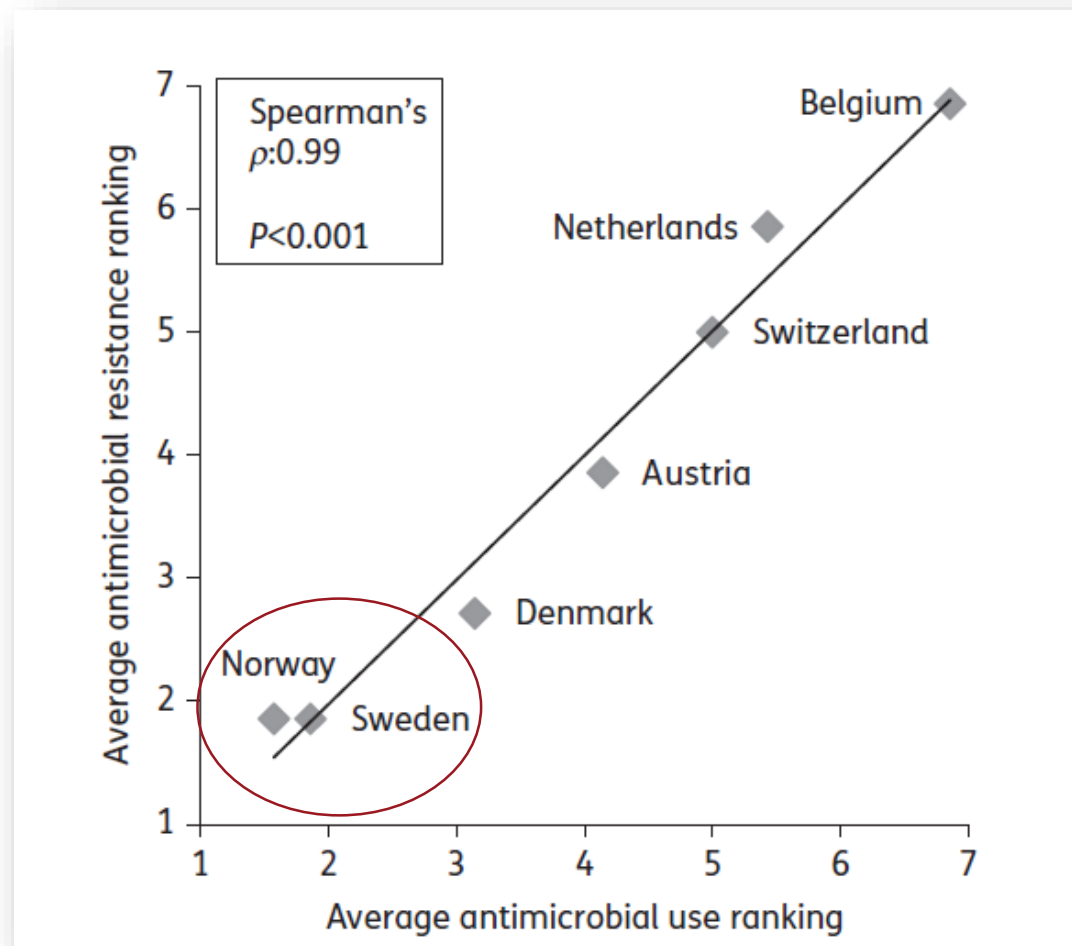


PCU =
population
correction
unit, similar
to live
biomass

MINAPIG PROJECT: MEAN TREATMENT-DAYS PER 1000 PIG-DAYS (ENTIRE GROWING PERIOD)



CORRELATION SALES - RESISTANCE

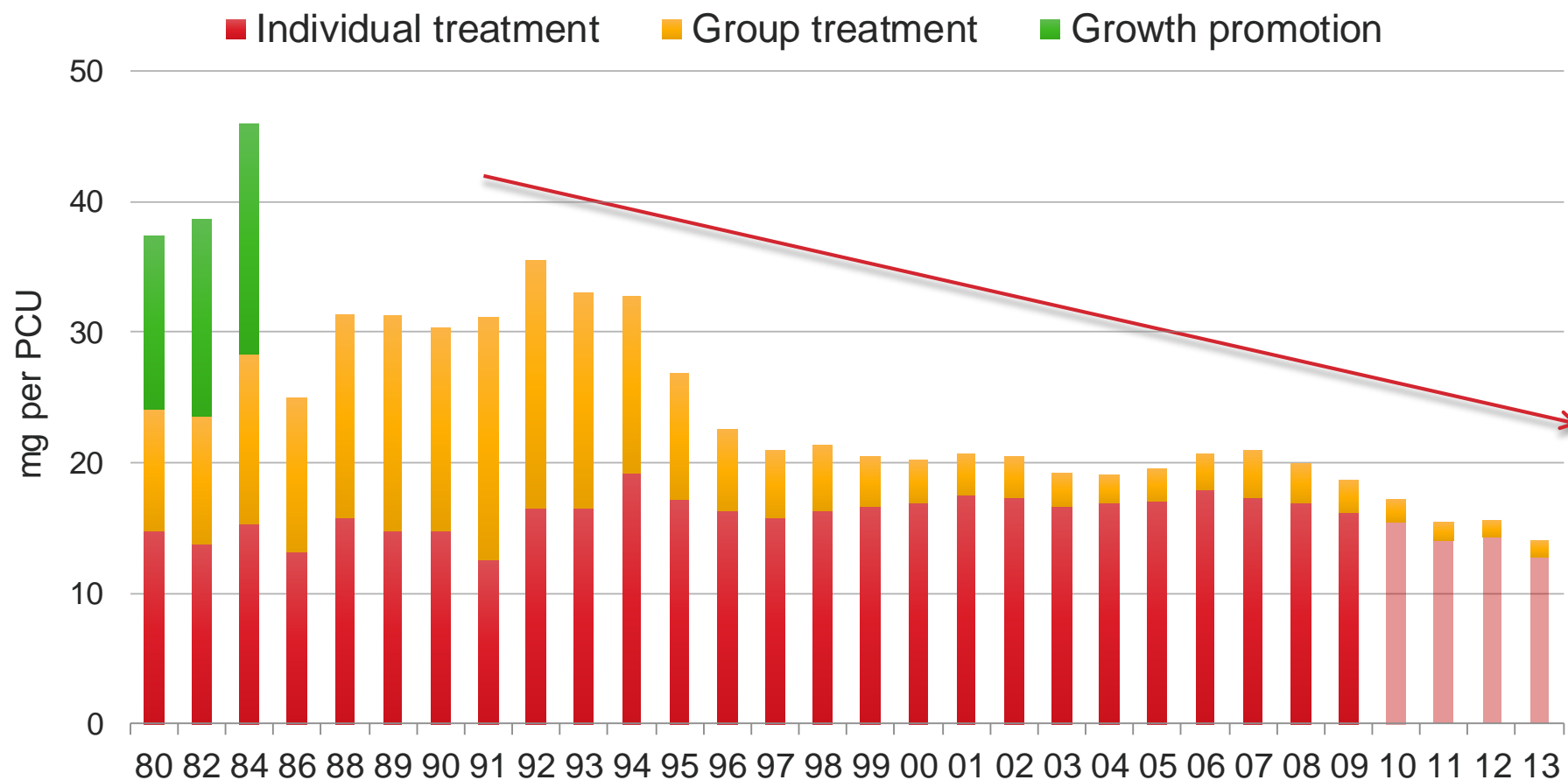


Correlation between veterinary antimicrobial use and antimicrobial resistance in food-producing animals: a report on seven countries

Ilias Chantziaras^{1*}, Filip Boyen², Bénédicte Callens¹ and Jeroen Dewulf¹

JAC 2014 doi 10.1093/jac/dkt443

SALES OF ANTIMICROBIALS FOR ANIMALS, SWEDEN



Source: Swedres-Svarm 2013.

Note that from 2010 there is a lack of completeness in the data reported from pharmacies.

IT IS NOT ONLY ABOUT ANTIBIOTICS

- salmonella control
- animal welfare
- non use of antibiotic growth promoters
- control or eradication of several infectious diseases (PRRS, Aujeszky's disease, IBR ...)
- internal and external biosecurity
- 'prudent use' of antibiotics
- problem solving "at the root" if possible



Photo: Marie Sjölund

SWEDEN: CLOSE COLLABORATION FOR BETTER IMPLEMENTATION OF GOOD TECHNIQUES



smittsäkra.se

Sök...

Startsida Nöt Gris Får Gårdens besökare Intresseanmälan

Välkommen till smittsäkra.se.

Delta är en informationssida om smittskydd för lantbrukets djur. Smittsäkra.se vänder sig till dig som är djurägare, djurskötare eller i yrket kommer i kontakt med lantbrukets djur.

På dessa sidor finns smittskyddsråd, fördjupad information om smittsamma sjukdomar och hur de sprids, samt ett självtest för bedömning av smittskyddet på gården. Här finns också information om det nya frivilliga smittskyddsprogrammet Smittsäkrad Besättning för gris- respektive nötkreatursbesättningar.

Smittsäkra.se drivs av Gård & Djurhälsan och Vaxa Sverige i samarbete med SVA. Sidan finansieras av Jordbruksverket.

Kunskapsbanken Smittsäkrad Besättning Hur smittsäker är din gård? Antibiotikaresistens

Nöt Gris Får Veterinär besökskläder Gårdens besökare

© Gård & Djurhälsan och Vaxa Sverige

Gård&Djurhälsan VAXA SVERIGE

USE OF ANTIMICROBIALS FOR CHICKENS, SE

Year	Flocks treated	Total N of flocks
2011	6	3185
2012	1	2853
2013	4	3133
2014	4	3138
2015	28	3191



Note:

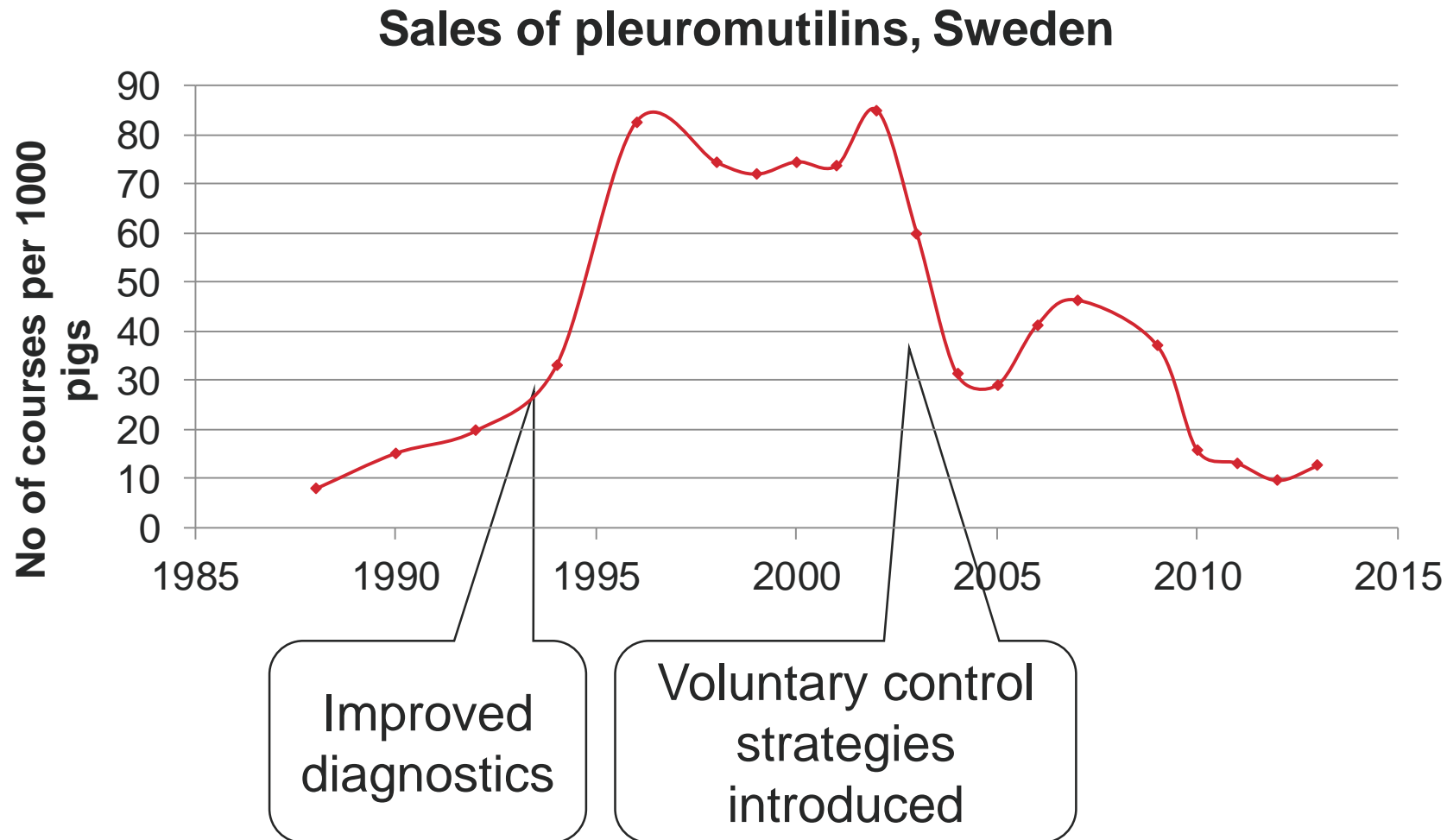
Ionophores are used in almost all flocks.

Swedres-Svarm 2011-2014; based on data from the Swedish Poultry Meat Association



REDUCING THE NEED: CONTROL OF SWINE DYSENTERY

FIRST CHOICE FOR TREATMENT: PLEUROMUTILINS



EFFECT OF TAILORED HERD HEALTH ADVICE, PIG PRODUCTION BELGIUM



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

WE NEED MODERN TOOLS

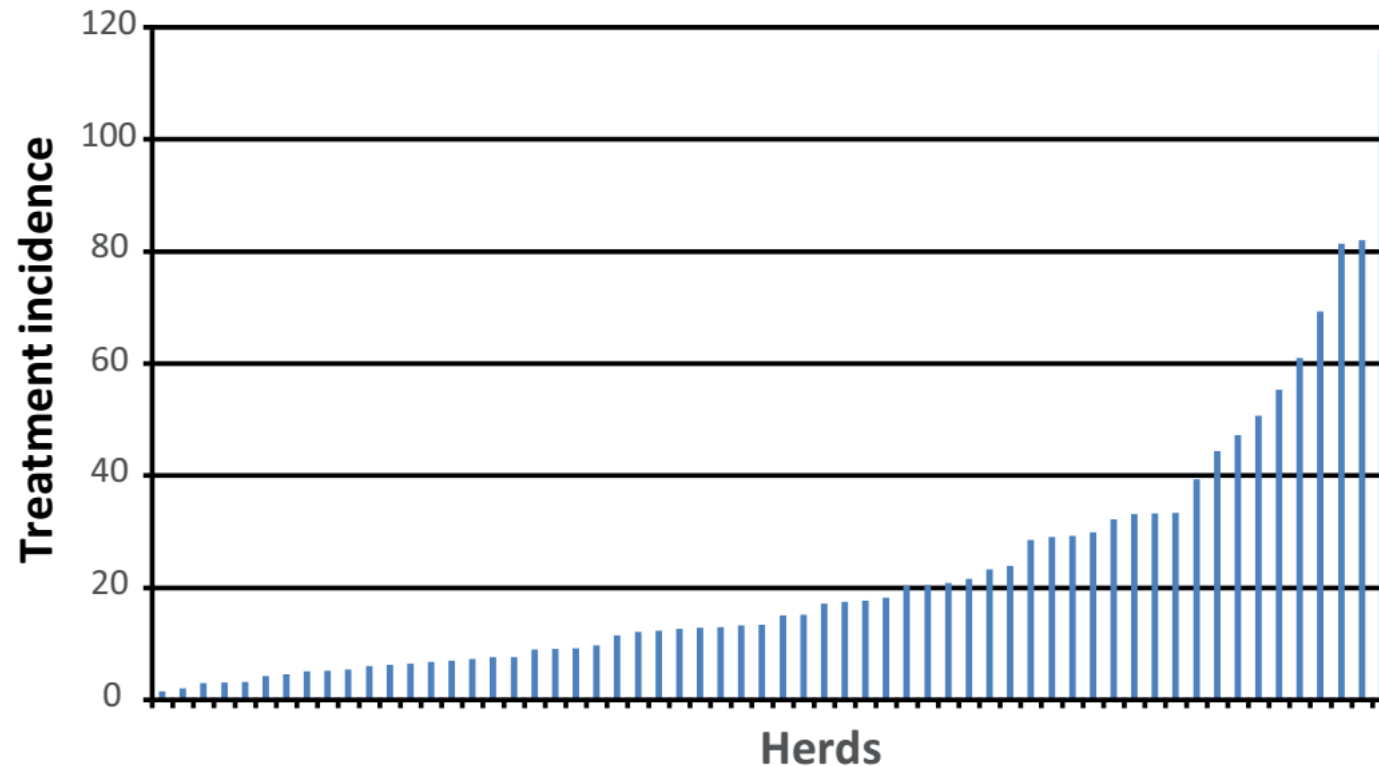


Fig. 1. Antimicrobial treatment incidences for growing pigs, with a standardized lifespan of 200 days and expressed as treatment incidence per 1000 pig-days at risk, for 60 Swedish farrow-to-finish herds.

A COMPOSITE STRATEGY

Remove unneccetary use

= growth promoters, routine prophylaxis

Avoid spread

= biosecurity, infection control, food hygiene etc.

Minimise need

= keep animals healthy

Optimise use when needed

= diagnosis, correct selection & dose

Monitor

= use and resistance