

The daily life of a swine vet in Denmark

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XLIV MEETING ANNUALE SIPAS, Italy

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- ▶ Background
 - ▶ Hyovet
- ▶ Daily life
 - ▶ Visits
 - ▶ Data
 - ▶ Antibiotics / Yellow card
 - ▶ Control



Bonnie Edahl Hoelstad

- ▶ 28 years old
- ▶ Graduated from University of Copenhagen, January 2016
 - ▶ Specialized in pig production
 - ▶ Master thesis: Introduction of replacement gilts to PRRS-positive sow herds
- ▶ Practical experience with pigs – farm work
- ▶ Employed by Hyovet since February 2016
 - ▶ Advisory of farmers, 4/5 days
 - ▶ Data work and projects 1/5 days

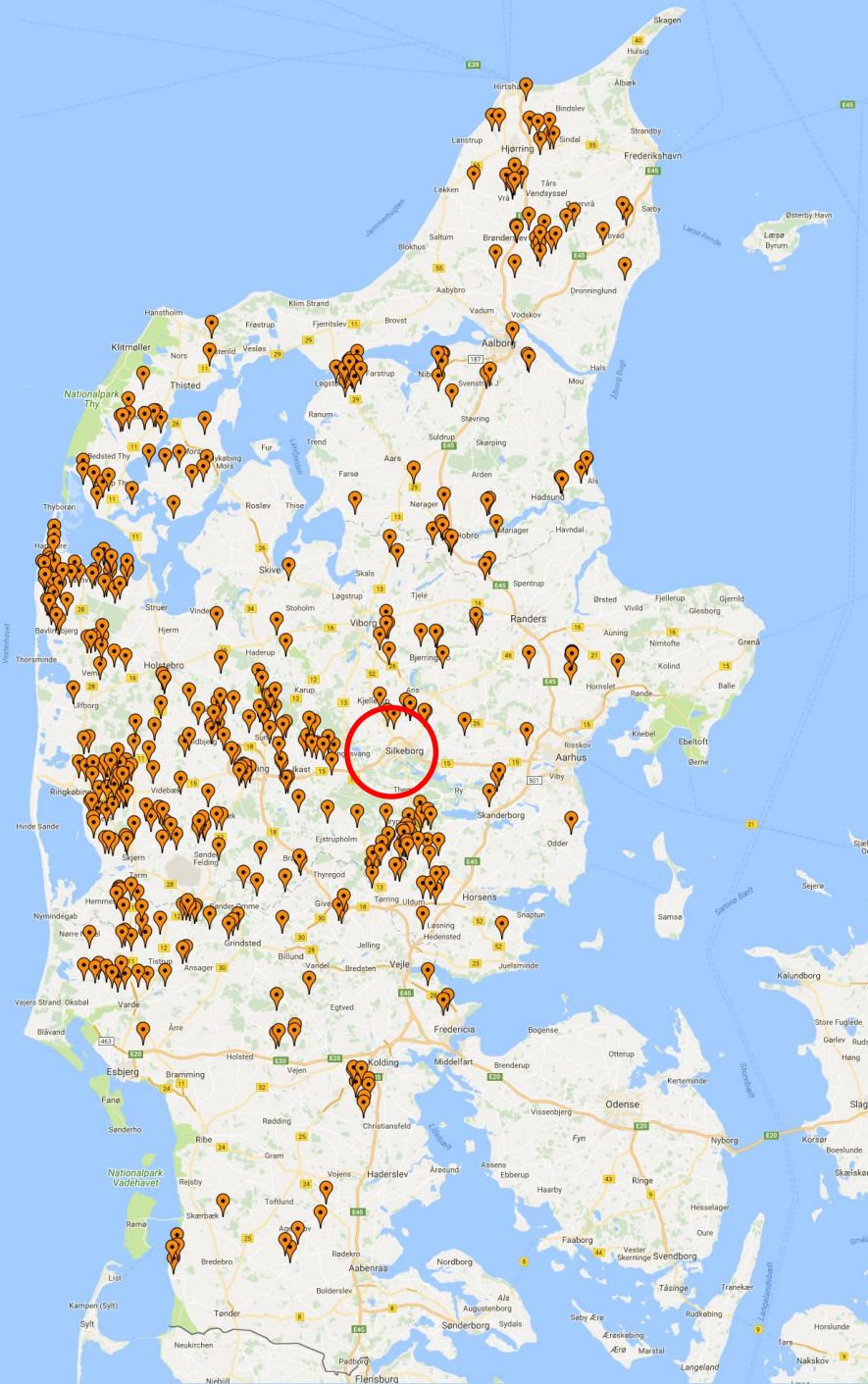


Hyovet – specialized swine practice

- ▶ Founded by K.E. Navntoft 1983
- ▶ 7 consulting veterinarians
- ▶ 150.000 sows ~ 15% of sows in DK
- ▶ 1.050 sows in average / sow farm
- ▶ 32,5 pigs weaned pr. litter in average
- ▶ Farm produced feed (2/3)
 - ▶ Cereals from own production



Located in Silkeborg, Jutland, DK



7 specialized swine practices in DK

- ▶ In total between 80-90 swine vets do all work in the Danish pig population
- ▶ Practices are private
 - ▶ No funding from the industry or the government
- ▶ Approx. 1 million sows
- ▶ Approx. 14 millions pigs sold for export at 30 kg

PORCUS
SVINEFAGDYRLÆGER



SvineVet
Professionel svinerådgivning



HyoVet



DANVET K/S

Visits

- ▶ Health advisory agreements
 - ▶ Antibiotics in feed/water: One visit pr. 35 days
- ▶ Always the same day of the week – 4 or 5 weeks interval
- ▶ Good contact by phone with farmers between visits
 - ▶ Important partner to the farmer

Visits: Primary agenda of consultancy

- ▶ Herd health / diagnosis of current disease problems (vaccinations / medication plans)
- ▶ Data analysis
- ▶ Feed-discussion, problem solving
- ▶ Employee-training and management development
 - ▶ No surgery - no acute treatments of animals!

Visits: Planning

- ▶ Visits are done according to health status
 1. SPF system with declared diseases, approx. 78%
 - ▶ Blood samples once pr. year
 - ▶ Highest status are visited in the morning
 2. Conventional



Before the visit: Data (Agrosoft WinPig/Agrovision 90%)

From date		26-02-18	05-02-18		08-01-18	04-12-17		04-09-17
To date		04-03-18	04-03-18		04-03-18	04-03-18		04-03-18
Period header	Plan	1	4	Deviation	8	13	Deviation	26
Reproduction								
Number of services (No)	87	93	93	6	93	90	3	88
Reservices (No)		6	5		4	4		3
Days to first service (No)	5	5	5	0	6	5	0	5
Sow Death Loss (No)		7	7		6	5		4
Culled & dead animals (No)		19	19		20	17		17
Pct dead of culled & dead animals (%)		36,8	37,3		29,4	31,3		25,9
Days from weaning to removal (avg.) (No)		7	12		11	12		11
Days from service to return (avg.) (No)		41	34		35	42		43
Days from service to removal (avg.) (No)		93	74		76	77		67
Pct dead of year sows (%)	9,0	20,3	18,9	9,9	16,4	14,7	5,7	12,2
Re-service rate (%)	3,5	6,5	5,1	1,6	4,0	4,2	0,7	3,4
Gilt Services (No)	19	23	26	7	26	23	4	20
Litter results - Farrowing								
Number of farrowings (No)	82	76	75	-7	78	78	-4	78
Total liveborn (No)	1358	1448	1435	77	1484	1465	107	1461
Liveborn/litter (No)	17,6	19,1	19,2	1,6	19,1	18,9	1,3	18,8
Stillborn/litter (No)	1,2	2,0	1,8	0,6	1,8	1,7	0,5	1,7
Age at first farrowing (Days)		378,45	371,70		370,24	370,13		369,47



Before the visit: Data (Agrosoft WinPig/Agrovision 90%)

Litter results - Weaning								
Total # of weaned pigs (No)	1222	1144	1265	43	1279	1259	37	1235
Weaned/weaning (No)	13,5	11,7	12,5	-1,0	12,9	13,0	-0,5	12,9
Weaned weight/piglet (Kg)	6,5	5,6	5,8	-0,7	5,8	5,8	-0,7	5,9
Weaned litters (No)	78	74	77	-1	78	78	0	77
Weaned pigs/litter (No)	16,5	15,5	16,4	-0,1	16,5	16,2	-0,3	16,0
Pre-weaning mortality (%)	12,0	19,2	13,6	1,6	12,2	13,5	1,5	14,9
Piglet deaths (No)		0	0		0	0		0
Nursing Sows (No)		24	25		22	20		19
SD on Weaned		3,4	2,3		1,3	0,8		0,4
Weanings (No)		98	102		99	97		96
Litter results								
Suckling days/litter (Days)	28	28	27	-1	27	27	-1	26
Pregnancy days/litter (Days)	116	118	118	2	118	118	2	118
Production								
Pigs weaned/sow/year (No)	37,5	36,8	39,1	1,6	39,0	38,2	0,7	37,5
Conception rate (CA) (%)		100,0	98,9		96,5	95,5		93,4

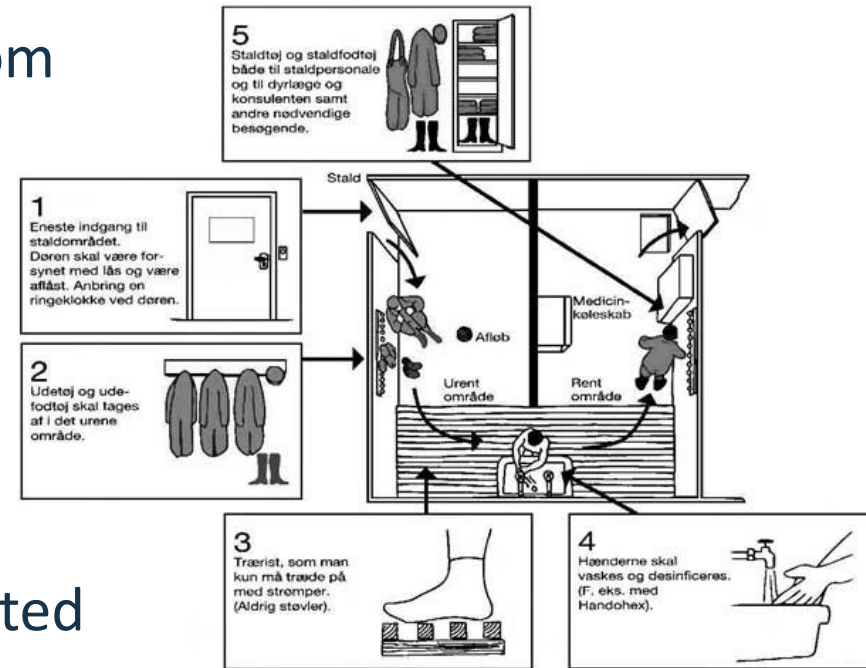
► NB: Same genetic – DanBreed: Yorkshire-Landrace-Duroc!



A typical visit

- ▶ Entrance through changing room
 - ▶ No shower in or out

1. All sections are reviewed
2. Pigs in hospital box are inspected
3. Medicine



1. All sections are reviewed (main part of a visit)

- ▶ Discuss problems

- ▶ Case:

- ▶ Farrowing section

- ▶ Aim to reduce piglet mortality

- ▶ Weekly monitoring with registrations made by the farmer



Dag	Lagt under faring	Døde < 800 g. v. faring	Døde < 800 g.	Lagt dag 1-5	Lagt dag 6-30	Opsamling < 5 d.	Opsamling > 5 d.	Diarré / infektioner	Sult	Andet	Total
Mandag											
Tirsdag											
Onsdag											
Torsdag											
Fredag											
Lørdag											
Søndag											

Monitoring preweaning mortality with "HyoLife"

- ▶ Diagnoses
 - ▶ Crashed piglets (at farrowing, day 1-5, day 6-30)
 - ▶ Small piglets
 - ▶ Piglets from collection groups
 - ▶ Hunger / starvation
 - ▶ Infections / diarrhea
 - ▶ Other



2. Pigs in hospital boxes

- ▶ Always one hospital box ready for use
- ▶ Soft bedding in 2/3 of minimum area
- ▶ Heat source and cooling facility
- ▶ Dry and clean
- ▶ Sows or gilts: maximum 3

- ▶ Animal welfare is important



3. Medicine

- ▶ Prescribe medicine for max. 35 days
 - ▶ Re-prescribe leftovers
 - ▶ Order new medicine
- ▶ Pharmacy receives the prescription and delivers the medicine at the farm
- ▶ No medicine in the car
 - ▶ We don't earn money selling medicine



Recordings are kept in a computersystem (Agrosoft WinVet)

Layout **HyoVet Ordination** 100% Poster 25 Udskriv

Dyregrp	Kode	Kode	Diagnose navn	Kode	Slag et	Navn	Indhold	Enhed	Reordination	Antal	Total	Forrige ordination	Ej substitution	Antal dyr	ADD55	ADD56	ADD57	Total Pris	Forbrug	Besætt
S	001		Ap infektion	26251	0	Hyobac App Multi Vet.	100,00	ds.	300,00	4	700,00	700,00	<input type="checkbox"/>	0,00	0,000	0,000	0,000	2164,00	0,00	
Pa	002		Bordetella	22359	33	Draxoin® Vet.	50,00	ml	250,00	0	250,00	400,00	<input checked="" type="checkbox"/>	2500,00	0,000	0,000	0,000	0,00	0,00	
P	046		Brunstsynchronisering	25496	9	Altresyn®	1080,00	ml	2000,00	5	7400,00	6480,00	<input checked="" type="checkbox"/>	82,00	0,000	0,000	0,000	5454,00	0,00	
Un	046		Brunstsynchronisering	25849	0	Altresyn BLÅ doseringspumpe 5	1,00	stk.	0,00	0	0,00	0,00	<input type="checkbox"/>	0,00	0,000	0,000	0,000	0,00	0,00	
Pa	005		Coccidiose	24585	77	Cevazunil® 50 mg/ml oral suspe	1000,00	ml	2500,00	4	6500,00	5250,00	<input checked="" type="checkbox"/>	9285,00	0,000	0,000	0,000	7720,00	0,00	
G	004		Colidiamé	26962	0	Rokovac Neo (særtil.)	50,00	ml	600,00	6	900,00	550,00	<input checked="" type="checkbox"/>	450,00	0,000	0,000	0,000	0,00	0,00	
S	007		Eubakterium Suis	4378	30	Noromox prol.	250,00	ml	300,00	1	550,00	1000,00	<input checked="" type="checkbox"/>	25,00	0,000	0,000	0,000	292,50	0,00	
S	012		Influenza	26338	0	Respiporc FLU3 injektionsvæske	50,00	ds.	200,00	0	200,00	1100,00	<input checked="" type="checkbox"/>	200,00	0,000	0,000	0,000	0,00	0,00	
S	014		Klovbylder	3033	30	Alamycin Vet., 100 mg/ml	100,00	ml	700,00	35	4200,00	6000,00	<input type="checkbox"/>	0,00	0,004	0,000	0,000	1120,00	0,00	
S	017		Ledbetændelse	5115	5	Penovet 0,3 mill. IE	100,00	ml	1100,00	10	2100,00	2500,00	<input checked="" type="checkbox"/>	46,00	0,002	0,000	0,000	730,00	0,00	
Pa	017		Ledbetændelse	3433	93	Clamoxyl Prol.	100,00	ml	300,00	5	800,00	1000,00	<input checked="" type="checkbox"/>	533,00	0,001	0,000	0,000	1050,00	0,00	
P	051		Leptospirose	3003	0	BioSuis Parvo L	20,00	ml	0,00	20	400,00	0,00	<input type="checkbox"/>	100,00	0,000	0,000	0,000	3000,00	0,00	
S	019		Manglende laktationsevne	4930	6	Oxytocin Vet. Novartis	50,00	ml	750,00	0	750,00	400,00	<input checked="" type="checkbox"/>	375,00	0,000	0,000	0,000	0,00	0,00	
S	023		MMA	3033	30	Alamycin Vet., 100 mg/ml	100,00	ml	1600,00	20	3600,00	4000,00	<input type="checkbox"/>	80,00	0,003	0,000	0,000	640,00	0,00	
P	021		Mycoplasmaledinfektion	23520	6	Denagard® Vet opl. 12,5%	5,00	liter	0,00	4	20,00	10,00	<input type="checkbox"/>	571,00	0,000	0,000	0,048	4495,80	0,00	
S	021		Mycoplasmaledinfektion	23520	6	Denagard® Vet opl. 12,5%	5,00	liter	0,00	4	20,00	0,00	<input type="checkbox"/>	333,00	0,023	0,000	0,000	4495,80	0,00	
P	021		Mycoplasmaledinfektion	4390	6	Noromylin Vet.	100,00	ml	400,00	0	400,00	600,00	<input checked="" type="checkbox"/>	13,00	0,000	0,000	0,000	0,00	0,00	
Pa	024		Navlebetændelse	4844	30	Noromox prol.	100,00	ml	1400,00	20	3400,00	4100,00	<input checked="" type="checkbox"/>	6800,00	0,002	0,000	0,000	2660,00	0,00	
S	025		Nysesygge	24841	0	Porcillis® AR-T DF	25,00	ds.	250,00	8	450,00	400,00	<input checked="" type="checkbox"/>	450,00	0,000	0,000	0,000	4866,00	0,00	
S	031		Rødsygge+PPV	21051	0	Parvoruvax® Vet.	25,00	ds.	600,00	0	600,00	750,00	<input type="checkbox"/>	300,00	0,000	0,000	0,000	0,00	0,00	
Pa	048		Smerter	20309	5	Metacam inj. 5 mg/ml	100,00	ml	0,00	5	500,00	700,00	<input checked="" type="checkbox"/>	5000,00	0,000	0,000	0,000	1430,00	0,00	
S	048		Smerter	26960	5	Meloxidolor inj. (meloxicam) 2	100,00	ml	300,00	10	1300,00	1400,00	<input checked="" type="checkbox"/>	260,00	0,000	0,000	0,000	0,00	0,00	
Pa	034		Sårinfektion	22525	0	Cyclo Spray Vet. (1/12)	211,00	ml	2532,00	0	2532,00	2532,00	<input checked="" type="checkbox"/>	506,00	0,000	0,000	0,000	0,00	0,00	
S	038		Tambrand+Coli	25653	0	Porcillis® ColiClos vet.	25,00	ds.	200,00	10	450,00	500,00	<input checked="" type="checkbox"/>	225,00	0,000	0,000	0,000	4880,00	0,00	
S	039		Transportsygge	22216	0	Porcillis® Glässer Vet.	25,00	ds.	250,00	16	650,00	750,00	<input checked="" type="checkbox"/>	650,00	0,000	0,000	0,000	4136,00	0,00	
									200,00		450,00	500,00			0,035	0,000	0,048			
														1,709	0,000	0,002				



Yellow card / Vetstat

- ▶ All medicine/antibiotics is registered in the Vetstat database
 - ▶ A tool to reduce the use of antibiotics
- ▶ Animal Daily Dose (ADD) per 100 animals per day

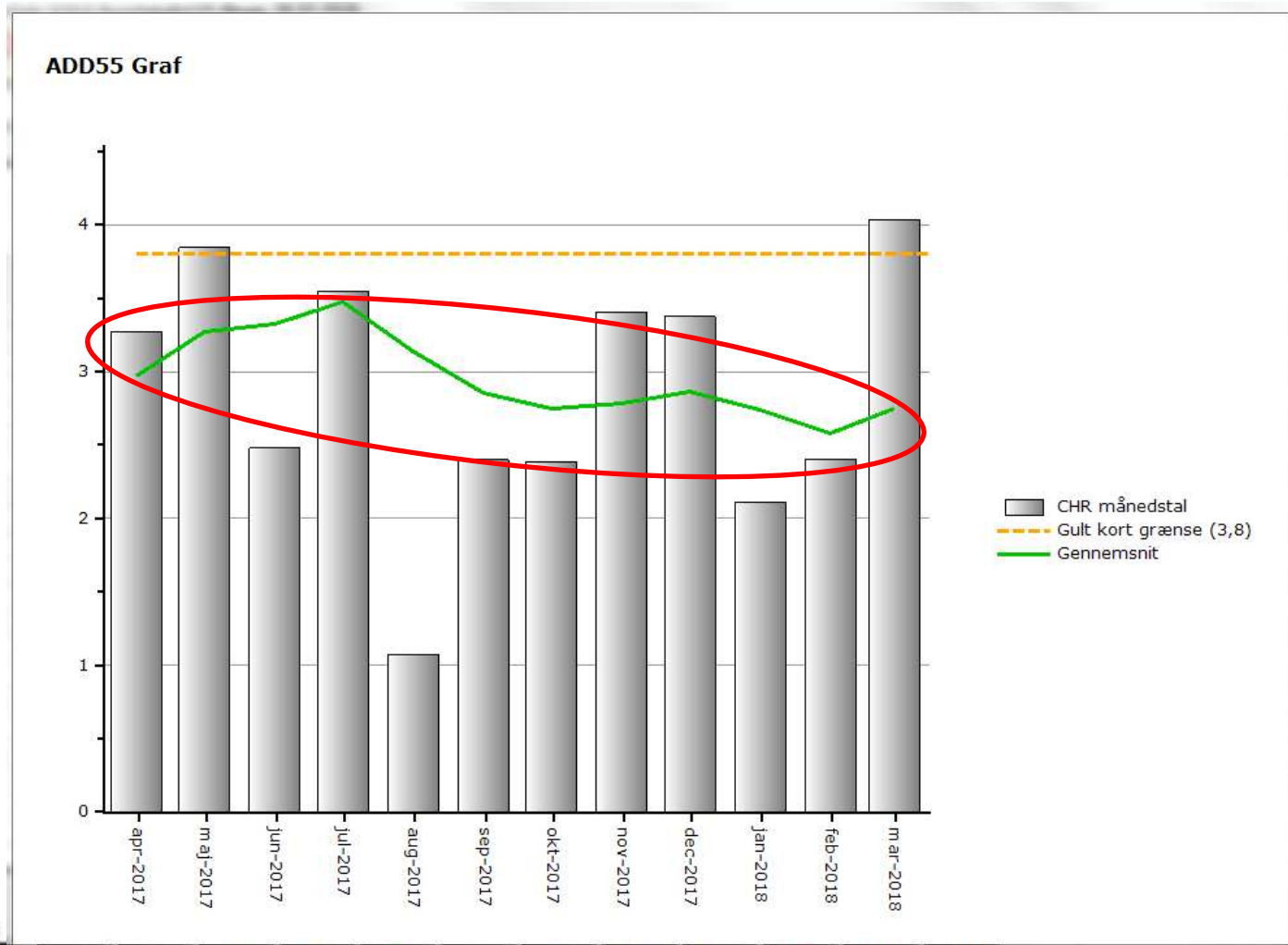
Thresholds for antibiotics 2018:

- ▶ Weaners: 20,2 ADD per 100 animals per day
- ▶ Slaughter pigs: 5,2 ADD per 100 animals per day
- ▶ Sows and piglets: 3,8 ADD per 100 animals per day

Antibiotics	Factor
Fluoroquinolones, 3rd and 4th Generations Cephalosporins and Colistin	10
Tetracyclines	1,5
Simple Penicillins, Sulfonamides, Trimethoprim and Pleuromutilins	0,95
Other antibiotics	1



Control of the antibiotics use before sending the prescription to the pharmacy



Yellow card / Vetstat

- ▶ If a farm exceeds the limit
 - ▶ A fine will be given from the government
 - ▶ Mandatory number of visits from the swine practitioner will double for 2 years



Zink

- ▶ 2.500 ppm ZnO/kg feed
- ▶ First 14 days after weaning
- ▶ Only with prescription from the vet

- ▶ Ban in 2022



A typical HyoVet medication protocol

Piglets in farrowing section

- ▶ Day 1 (new born): Injection with 15 mg/kg Amoxicillin (prolonged) once
- ▶ Day 4 (castration): Injection with 2,5 mg/kg Tulathromycin once

Weaners (5,5-6,0 kg, approx. 24 days pr. pig)

- ▶ Aminoglycosides / Tetracyclines / Pleuromutilins / Tilmicosin
 - ▶ First day after weaning: 3 days treatment in feed or water
 - ▶ Transition from feed with zink: 3 days treatment in feed or water

Slaughter pigs

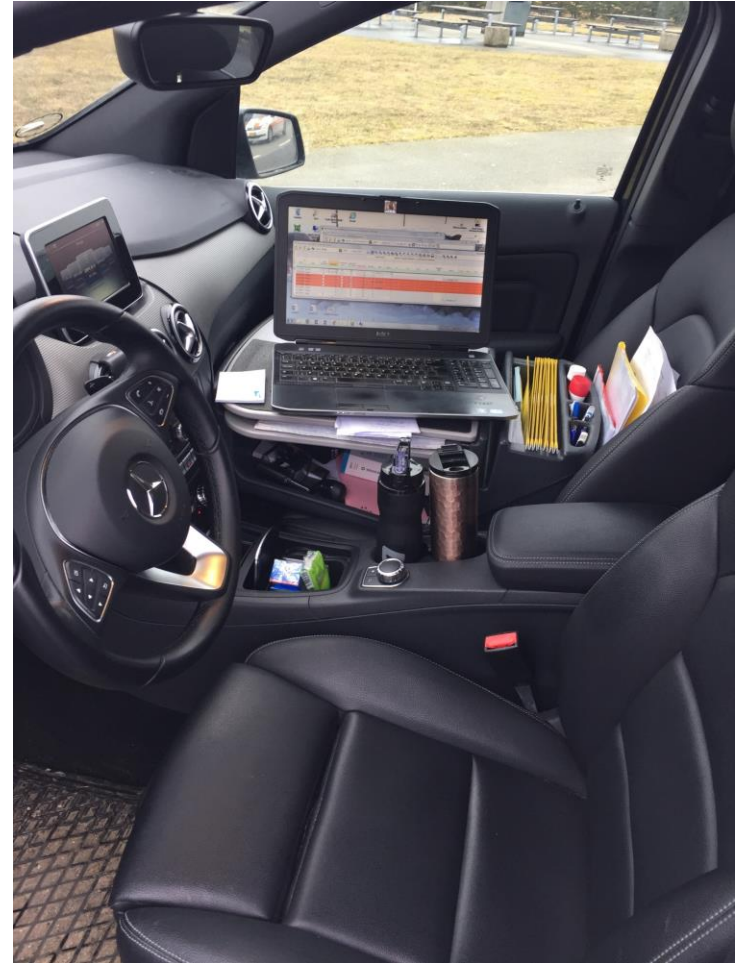
- ▶ Pleuromutilins / Tetracyclines in feed or water, 3 days
 - ▶ After moving to slaughter stable at 30 kg

Sows - no standard treatments



After the visit: Reporting

- ▶ Dictate reports while driving...
- ▶ Secretaries write the reports



Control of veterinarians and pig producers

- ▶ By the government



**Ministry of Environment
and Food of Denmark**

Danish Veterinary and
Food Administration

- ▶ Aim: To ensure a good animal welfare and a high standard within food safety
- ▶ Control is "feared"

Up to date with knowlegde

- ▶ Monthly meetings at the Hyovet office
 - ▶ Speakers from companies and universities
- ▶ Network groups
- ▶ Danish Pig Research Centre (SEGES)
- ▶ Congresses

Thank you

