Regional PRRS eradication

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Svinepraksis.dk
Introduction
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- Svinepraksis.dk provides veterinary service for 250 swine herds
- Most herds are located in Eastern Jutland
- Eastern Jutland has a very high swine density
- Only few herds have high health status
- Most herds has App and Mycoplasma
- PRRS control reduces the negative influence of respiratory diseases on swine health
Introduction

- Danish swine industry
- SPF system
- Motivation for PRRS control
- PRRS control in practice
- Health vision 2017
PRRS positive herds year 2000
PRRS pos. herds 2012
Regional PRRS eradication

The area includes 179 swine herds

- 70 % are PRRS negative
- 6 % have a PRRS positive sow herd but produce PRRS negative pigs
- 20 % are PRRS positive but expecting to become negative in 2013/2014
- 4 % are PRRS positive
Swine herd structures in Denmark
Eksport of 30 kg pigs

• 2001: 1.1 mio pigs
• 2007: 3.9 mio pigs
• 2008: 5.9 mio pigs
• 2009: 7.0 mio pigs
• 2010: 7.5 mio pigs
• 2011: 8.5 mio pigs
• 2012: 9.8 mio pigs
German production of finishers

2009: ~ 56.3 Mio. Schweine
+ 1.3 Mio. Schweine (+ 2.4 %)

Prognose ’10
58.7 Mio.
The Danish SPF system

• Since 1971
• **Specific Pathogen Free**
• 18 infectious swine diseases
• SPF-SuS – Health Status Dept.

• 3270 herds have SPF-status
• 73% of the sows in Denmark are SPF sows
Health status is accessible online

www.spf-sus.dk

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Medicine consumption

• Big public focus on medicine consumption in Danish swine herds
• AGPs were banned in year 2000
• Vague rise in antibiotic consumption from 2000 to 2010
• From 2010 ”yellow card” program for herds with a high antibiotic consumption
• The consumption is reduced 20%
Medicine consumption

Måned

Forbrug (kg)
Årsopgørelse 01/08/2010 til 31/07/2011

CHR-nr. : 93105
Adresse og bruger : Tuskærvej 9, 8300 Odder, Lars Kreutzfeldt Rasmussen
Dyreat : 15 - Svin
Aldersgruppe : E7-E8 i og omegn 20 kg lige efter fødsel
Region : f

FVBT's grænseværdi, løbende 9 måneder
Motivation for PRRS control

- Increase income
- PRRS negative 30 kg. pigs cost 3 pound more
- Control of respiratory diseases
- Reduction of antibiotic consumption
- PRRS can be eradicated without stop in production
Difference PRRS pos/PRRS neg 30 kg pigs for 2010 – 2012 in DKK
Cost of reinfection in sow herds

Loss per sow place, 30 weeks after outbreak PRRS

Δ GM

euro/sow place

4
-18
-28
-35
-6
-62
-79

PRRS strain

DK
DK
DK+akute VAC
VAC
VAC
VAC
VAC85

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Cost of PRRS in finisher productions

- Figures from US study in 2011
- 45% of loss in breed herds
- 55% in growing pig herds
  - Higher mortality
  - Lower daily gain
  - Higher feed conversion ratio
PRRS control in practice
PRRS control in practice

• All gilts are vaccinated using a live PRRS vaccine
• Piglets born subsequently are PRRS negative
• PRRS virus is eradicated by means of strict all in - all out principles
Vaccination of gilts

• When gilts are vaccinated with a MLV vaccine, they shed virus for 4-6 weeks
• Vaccination of gilts should always take place in a quarantine room
• The quarantine room should be placed at another site than the sowsite
• The gilts should be in quarantine for at least 8 weeks
Multisite production

- Multisite production is the key to successful PRRS control and eradication
- Most important that finishers are moved to another site away from the sowherd
- Stops virus spreading in the herd
Multisite production

Herd with sows and finishers at one site:

- Nursery
- Farrowing unit
- Finisher unit
Multisite production

Stop for spreading of diseases in the herd:

- Nursery
- Farrowing unit
- Finisher unit
Practical PRRS control

• The biggest challenges are the constructions of the buildings
One way flow

Total clearence of nurseries every 8 weeks
Every finisher section is totally cleared 3.8 times a year
Problematic flow

• Pathway shared through all sections
Creative solutions to obtain an acceptable herd flow
PRRS in finisher pigs

Sow herd with AP 6 + Myc. PRRS Neg

Herd 1
All in/All Out

**PRRS neg**
Mortality: 1.4 %

Herd 2
300 30 kg pigs every week

**PRRS pos v 50 kg**
Mortality: 3.4 %
Health Vision 2017

• Cooperation between veterinarians and agricultural organisations
• Voluntary participation in eradication
• On a distant time horizon
• Many farms has been rebuild, because of loose sows housing rules.
• Svinepraksis.dk coordinates the process
Health Vision 2017

• The area is geographically well-defined
• It’s bordered to the north, east and south by coast and urban areas
• To the west the area is bordered by the E45 and lakes
• The risk of airborne reinfection is thereby reduced
Health Vision 2017
Health Vision 2017

Animal flow in the area:
• A large number of sow herds
• Roughly no pigs are transported into the area
• There are no plans to regulate the transportation of pigs at this moment
Future perspective

- Health Vision 2017 is to be seen as a pilot project for an upcoming national PRRS strategy
- At this time several smaller regional projects are being scheduled
- The acknowledgement of PRRS influence on swine health and the opportunities of eradication are spreading within the swine industry
Percentage of PRRS positive farms in DK

DK i procent
Vac i procent

Svinepraksis.dk
Conclusion

• PRRS can be eliminated while in full production
• The biggest challenge is rebuilding the units to obtain all-in all-out
• Possible to control other respiratory diseases
• Reduction in medicine consumption
• Improved economy
Thank you for your attention