



Preweaning mortality in 9 Danish herds

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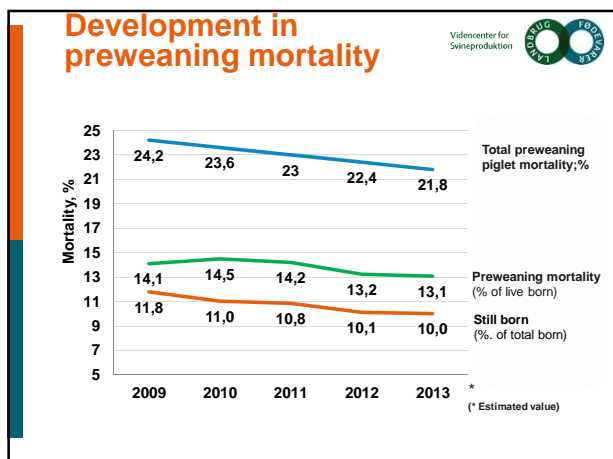
Pig Research Centre, Danish Agriculture and Food Council, Denmark




Mortality in Danish pigs



- Average mortality for 2012
- Suckling period 13.7%
- Nursery period 2.9%
- Grower-finisher period 3.6%




Objective




- The objective of this study was to establish causes of mortality in 9 herds and in different age groups of suckling piglets

Materials and methods




- 9 herds with preweaning mortality of 17% (12-23%)
 - Herd size 250-1450 sows
 - 56-74 sows per herd included in the study
 - 578 sows included
 - 10069 total born piglets
 - 1465 piglets necropsied

Materials and methods



- Recordings sow
 - Farrowing day, parity and litter size
- Recordings piglet
 - Day of birth, birth weight, ear tag number, sex and day of death
- Necropsy
 - Stored in freezer before shipment to laboratory
 - Necropsy performed at Laboratory for Pig diseases, Denmark

Materials and methods

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- **Categories of diagnosis**
 - sepsis
 - hernia
 - trauma
 - arthritis
 - starvation
 - enteric disease
 - miscellaneous
 - not viable
 - weak born, immature or had a birth weight below 700 gram
- **Age groups of piglets**
 - Day 1-4
 - Day 5-11
 - Day 12 - weaning

Sepsis after taildocking

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Sepsis after taildocking

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Sepsis/polyserositis

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Arthritis and abscess

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Arthritis and abscess

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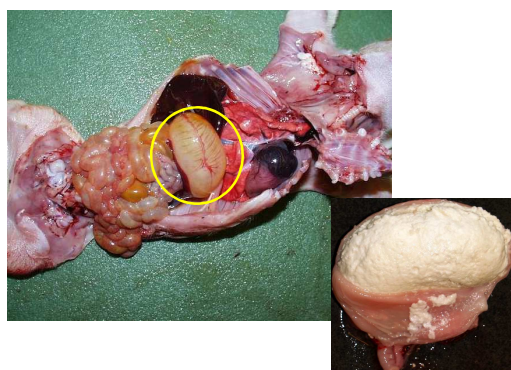
Arthritis/synovitis

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Starvation

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Enteric disease

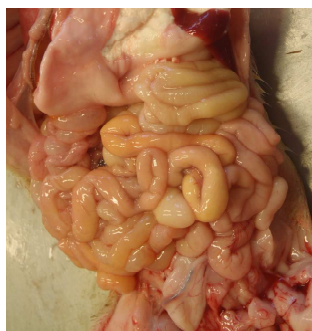
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Photo Hanne Kongsted

Enteric disease

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Immature piglet

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Photo. Janni Hales Pedersen

Immature/weak born piglet

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Results mortality proportion

- Day 1- 4 **59% (41-74%)**
- Day 5-11 **21% (9-31%)**
- Day 12-weaning **20% (8-30%)**



Birth weight piglets

Category	Average birth weight, kg	Minimum	Maximum
All live born	1.32	0.24	2.80
Survived	1.37	0.51	2.80
Dead	1.07	0.24	2.29

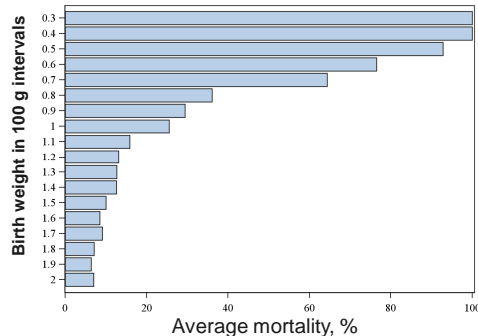


Birth weight, dead piglets

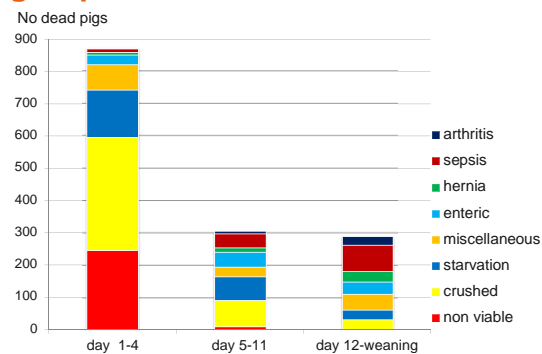
Age category	Average birth weight, kg	Minimum, kg	Maximum, kg
Day 1-4	0.97	0.24	2.31
Day 5-11	1.20	0.43	2.17
Day 12 - weaning	1.24	0.57	2.29



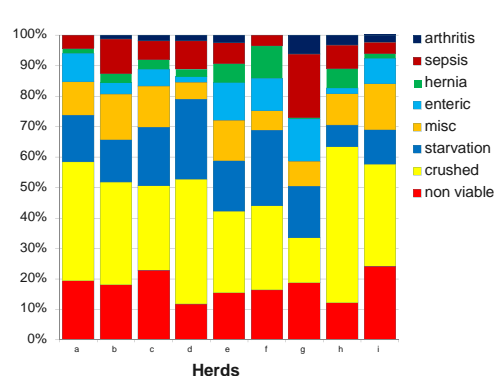
Critical birth weight?

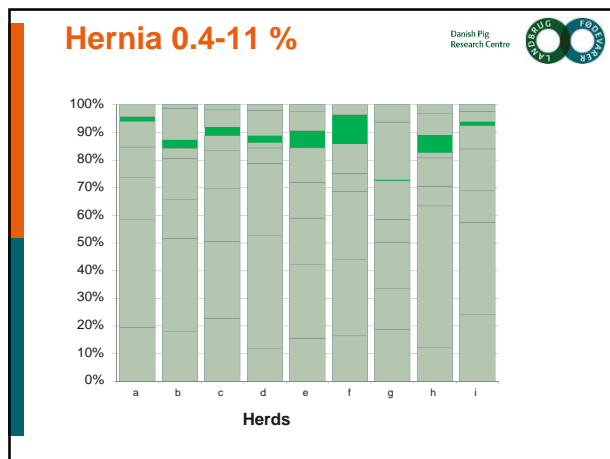
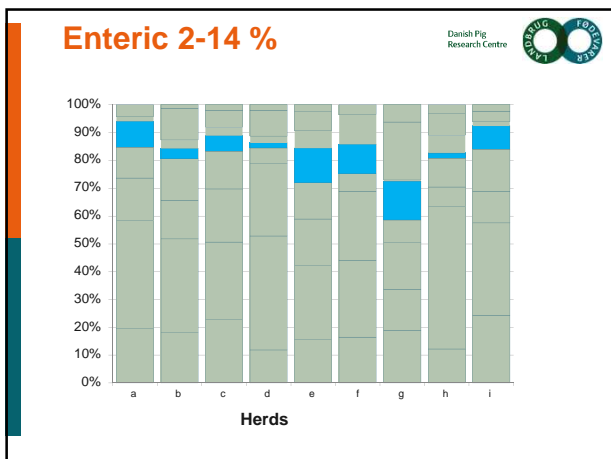
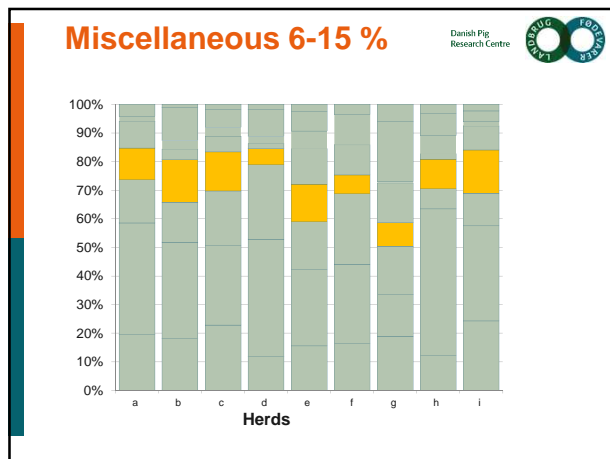
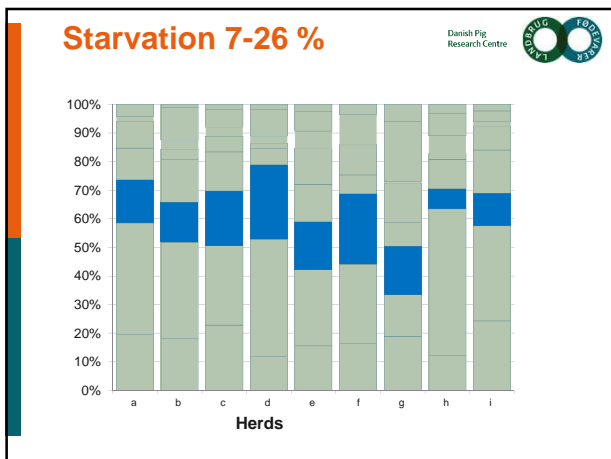
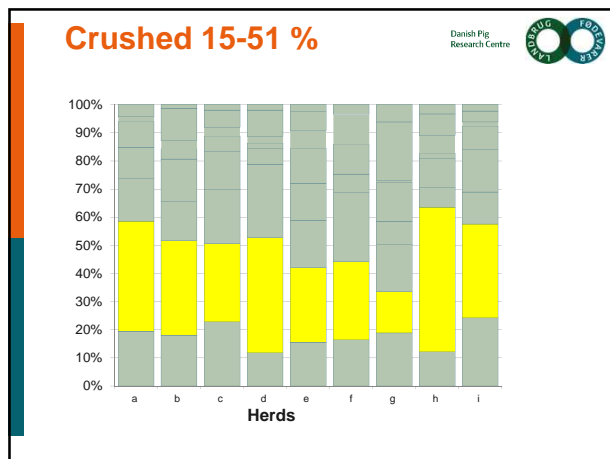
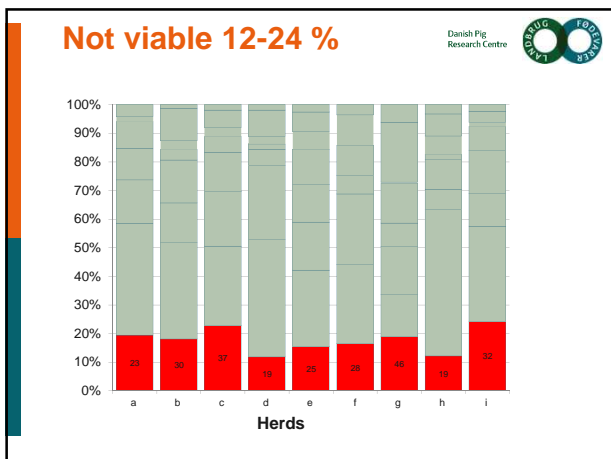


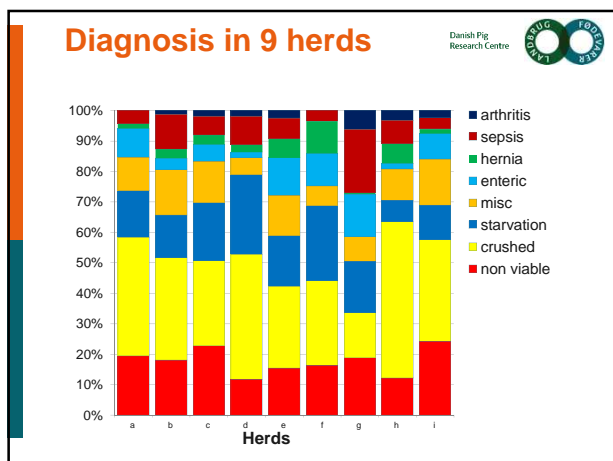
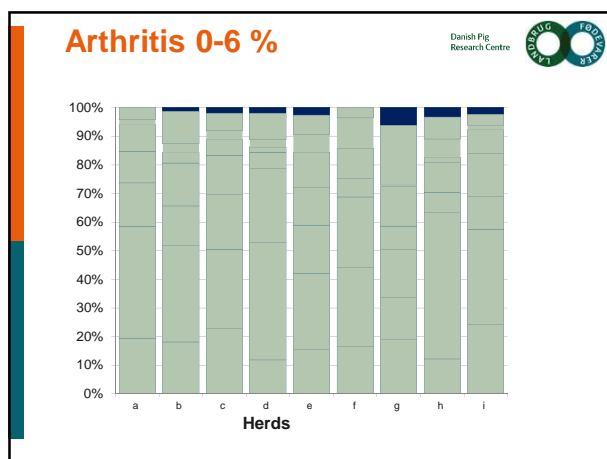
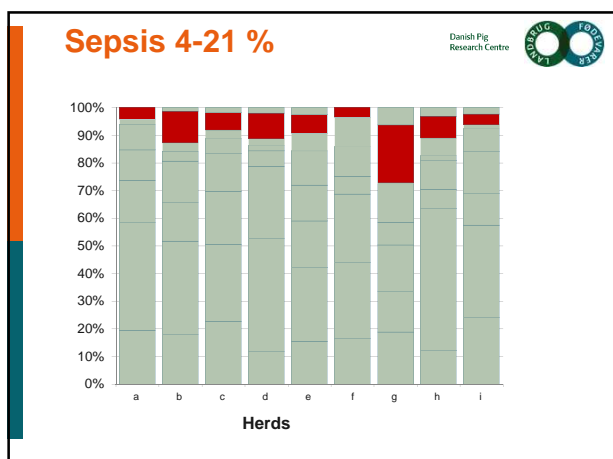
Diagnosis in three age groups



Diagnosis in 9 herds







Conclusion

- The results from this study shows
 - Variation in the causes of death in the 9 herds
 - Different causes of death in the three time periods
 - Piglets < 750 g birth weight have less than 40% chance of survival

Perspective

- Prewaning mortality could be further reduced by herd specific strategies based on herd specific diagnosis

Acknowledgements

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