# Baseline data on still born piglet in 9 Danish herds

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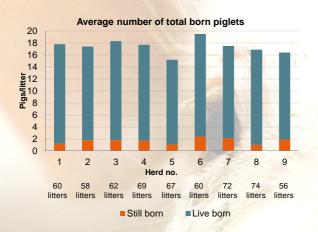
## **Objective**

The objective of this study was to analyse the association between parity, litter size, birth weight, and still born piglets in herds with large litter size. The criteria of a piglet being still born were that lungs did not float when put into water.

## **Materials and Methods**

From each of 9 herds, all piglets from approximately 70 consecutive farrowings were weighed (58 – 74). All still born piglets were necropsied. For all sows included in the study, parity and litter size (live born and still born) were recorded. A total of 10,069 piglets were included.

The probability for the individual piglet to be still born was analysed in a generalized linear mixed model with parity, litter size, and birth weight as explanatory variables while herd and sow was included as random effects. The three explanatory variables were dichotomized.



Effect of parity, litter size, weight on still born

Parameter	Odds ratio	95% CI	P-value
Low parity <sup>1</sup>	0.41	0.31-0.54	<0.001
High parity	1	-/20	- 18
Low litter size <sup>2</sup>	0.76	0.58-0.98	0.004
High litter size	1	· A	
Low birth weight <sup>3</sup>	3.04	2.51-3.68	<0.001
High birth weight	1	- 1	-

¹Parity<3 ²Litter size<19 ³Birth weight≤1.29 kg

#### Results

In the analysis, piglets with a low birth weight had 3.04 higher odds for being still born than piglets with a high birth weight (> 1.29 kg). Birth weight was the most influential of the three tested parameters.

Piglets born by a low parity sows had a 0.41 lower odds for being still born than piglets born by a higher parity sow. Parity is the second most influential parameter.

Piglets born in litter sizes < 19 (low) had 0.76 lower odds for being still born than piglets born in larger litters. Litter size was the less influential of the tested parameters.



All still born piglets were necropsied



Lungs from still born piglets did not float

### **Conclusions**

Low birth weight, old sows and high litter size increased the risk of a piglet to be still born.

#### Acknowledgements

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