

Higher piglet mortality in designed farrowing pens compared with traditional farrowing crates

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INTRODUCTION

Loose housed systems for farrowing and lactating sows can only be considered a realistic alternative to farrowing crates if equal or better production results can be obtained.

The aim of this study was to compare piglet mortality in Free Farrowing pens (FF-pens) and farrowing crates in commercial pig farms.



Figure 1. Examples of farrowing pen for loose housed sows (left) and farrowing crate (right) used in the study.

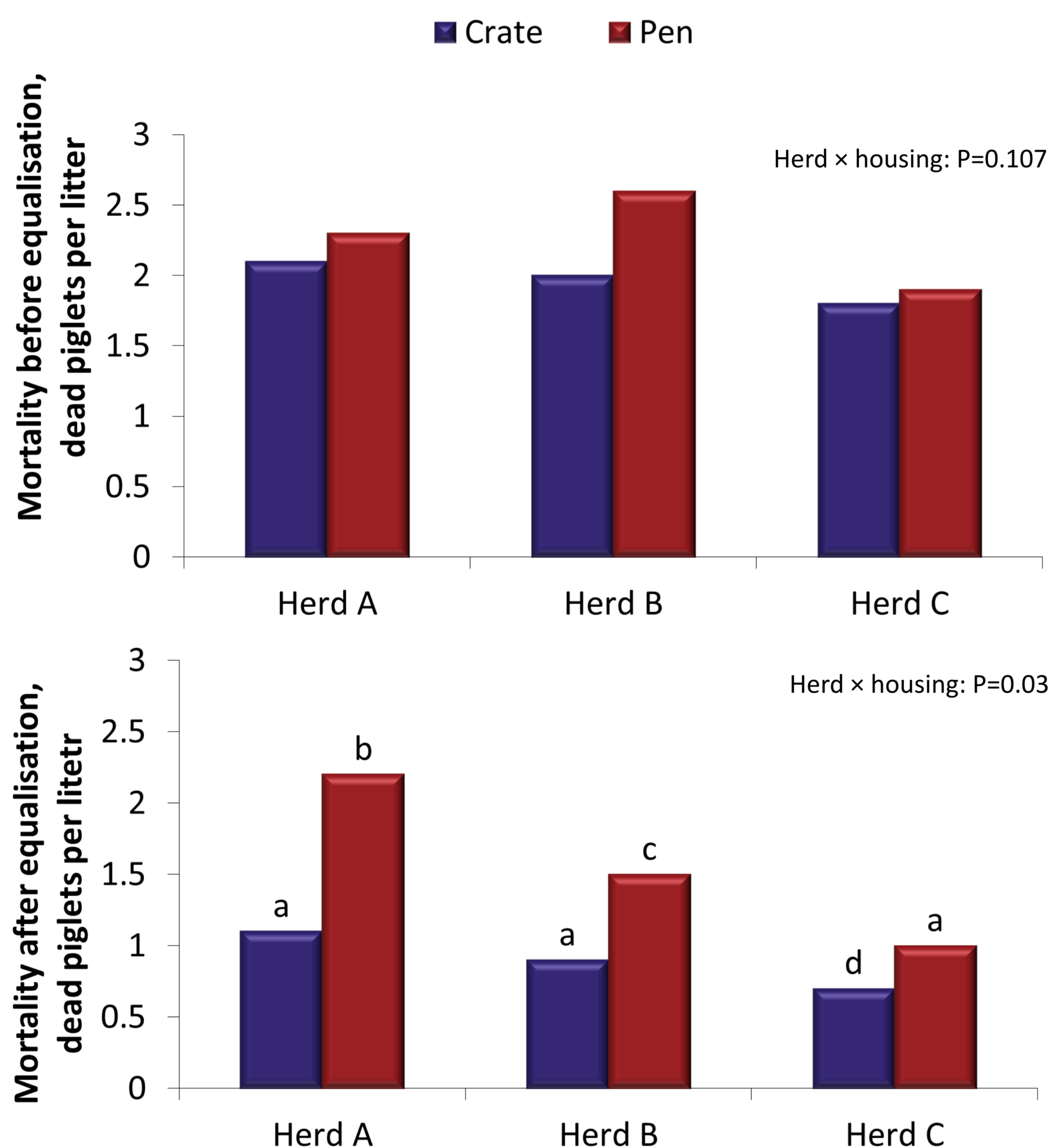


Figure 2. Piglet mortality in crates and pens in Herds A, B and C. Top: mortality before equalisation, bottom: mortality after litter equalisation. Columns with different superscripts differ ($P < 0.05$).

MATERIALS AND METHODS

The study was conducted in three commercial herds (A, B, and C) that had both farrowing crates and FF-pens in their farrowing units. Piglet mortality was analysed by use of linear models in two periods: before litter equalisation and after litter equalisation.

RESULTS

- Average number of total born piglets per litter was 17.0 in Herd A, 17.3 in Herd B and 16.1 in Herd C.
- Piglet mortality before litter equalisation was higher in FF-pens (13.7%) than in crates (11.8%) ($P < 0.001$).
- Piglet mortality increased before ($P < 0.001$) as well as after ($P < 0.001$) litter equalisation with increasing parity.
- Larger litter size at birth increased mortality before equalisation ($P < 0.001$).
- Larger equalised litter size increased mortality after equalisation ($P < 0.001$).

CONCLUSION

Piglet mortality was higher in FF-pens compared with traditional crates. Some sows in pens were able to deliver the same level of mortality as sows in crates, but the proportion was too small to consider FF-pens a robust type of housing.

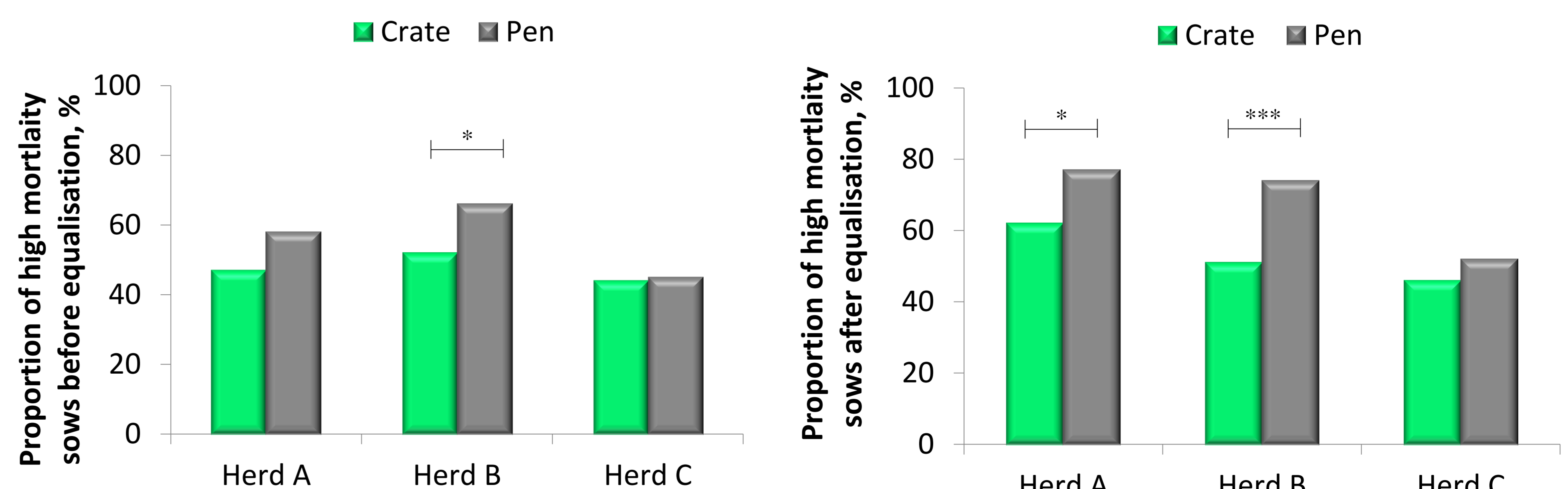


Figure 3. Percentage of high mortality sows in crates and pens in Herds A, B and C. Left: before litter equalisation (high mortality > 11%); right: after litter equalisation (high mortality > 7%).