

Question to EURCAW-Pigs: Loose farrowing for sows

30 June 2021

Question

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EURCAW-Pigs received the following questions from a veterinary inspector at a government of one of the Member States:

- What are the optimal space dimensions in a loose farrowing pen to reduce overlaying of piglets by the sow?
- Based on current thinking is there a minimum free farrowing pen size whereby overlaying of piglets is minimised?

Answer

Several EURCAW-Pigs experts contributed to the response below. The EURCAW secretariat did the final editing, and may be contacted for queries: <u>info.pigs@eurcaw.eu</u>.

Current knowledge point towards that well-designed pens for loose housed sows provide the best protection for the piglets since they allow sows to express different maternal behaviours that promote piglet survival. A well-designed pen needs to be at least 6-7 m² to allow division of space into functional zones (lying area with solid floor, dunging area with slatted floor and a separated creep area for piglets). A zone division will allow provision of nest building materials, a clean and thermal comfortable birth place covered by some straw or similar materials, and a cooler slatted floor area for defecation and thermoregulation (during hot periods). By using design features such as sloping walls and a separated and heated creep area for piglets, the risks of crushing are likely to be reduced. Pens for loose housing also provide more space for piglets to suckle undisturbed, which improves growth. To allow the sow to be able to defecate outside the lying area the pen size need to be wider than the length of a mature sows (>2 m), and at least 3 m long. The heated creep area need to be large enough to accommodate 12-14 piglets (common number of suckling piglets in prolific breeds). This will take up 1,1 - 1,3 m² of the pen area.

We will draw your attention to the <u>dossier</u> and <u>review</u> on the web-page of EURCAW-Pigs on farrowing housing and management. By mid 2022, more information will be added on best practices with examples and principles for well-designed pens for loose housed sows.

Key references

Cronin, G. M., Dunsmore, B., & Leeson, E. (1998). The effects of farrowing nest size and width on sow and piglet behaviour and piglet survival. *Applied Animal Behaviour Science*, *60*(4), 331-345. <u>https://doi.org/10.1016/S0168-1591(98)00159-2</u>

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Weber, R., Keil, N. M., Fehr, M., & Horat, R. (2009). Factors affecting piglet mortality in loose farrowing systems on commercial farms. *Livestock Science*, *124*(1-3), 216-222. <u>https://doi.org/10.1016/j.livsci.2009.02.002</u>