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**Biosecurity: a room for improvement in pig herds persistently infected by swine influenza virus**

Christelle Fablet1\*, Timm Harder2, Lars E. Larsen3, Chiara Chiapponi4, Enric Mateu5, Helen E. Everett6, Séverine Hervé1, Alice Prosperi4, Shannon Leetham6, Andrea Luppi4, Gaëlle Simon1, Nicolas Rose1

[1 christelle.fablet@anses.fr](mailto:1%20christelle.fablet@anses.fr), ANSES, France

2 FLI, Germany

3 UCPH, Denmark

4 IZSLER, Italy

5 UAB, Spain

6 APHA, United Kingdom

**Background/Objective**

Swine influenza A viruses (swIAVs) are known to become enzootic in confined herds. This study investigated primary biosecurity measures and husbandry practices used in such permanently infected herds across six European countries.

**Methods**

The study was conducted in 15 pig herds with circulating swIAV in France, Germany, Denmark Italy, Spain and the United Kingdom. During an on-farm visit, a detailed questionnaire was completed to collect data on the farm's main characteristics, management, and factors related to biosecurity, husbandry, and airflow between sections that could influence the introduction and spread of swIAV.

**Results**

The herds were either breeding to nursery or farrow-to-finish operations (7 and 8 herds, respectively) with an average of 889 sows per herd. Most herds used a one- or two-week farrowing batch interval (73.3%). In 6 out of 15 herds, workers did not change overalls and boots across farm activities (animal and crop production). In every herd except one, at least one worker wore the same overalls and boots to visit several sectors. Cross-fostering and mixing pigs from different litters at weaning was common practice (15 and 14 herds, respectively) as well as changing stocking density during nursery rearing (9 herds). Some herds also mixed and/or housed pigs from different batches together. In over half of the rooms observed across all sections (20/37 rooms; 8/9 herds), the exhaust air could mix with the intake of another room. Such airflow failure could affect all areas in some farms. Holes in the walls were observed in 17/41 rooms (9/11 herds).

**Conclusion**

Assessment of the biosecurity measures in 15 representative herds persistently/chronically infected by swIAV from six European countries, revealed several common flaws in biosecurity practices in respect to personnel behaviour, management and housing. Correcting these critical points could help reduce the probability of swIAV persistence at the herd level.

**Keywords:** swine, influenza, epidemiology, hygiene