

Question to EURCAW-Pigs: Verification of weaning age

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Question

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When visiting a farm it is not always clear if the piglets are not weaned too early. Can EURCAW-Pigs provide a method to verify the average weaning age of piglets, based on information available to the inspector? The answer should take into account the different nurse sow systems.

Answer

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

In short, the answers are:

- On a smooth running multiplier farm that keep sows on the unit during pregnancy, there should be maximally 6.9 times as many sows nursing compared to sows not nursing for an average weaning age of 21 days. This figure is maximally 6 for an average weaning age of 24.5 days.
- On farms where sow reproductive performance cannot be determined, is not reliable or of low standard, the information on the number of piglets weaned per week should be compared to the number of piglets suckling. On any given moment there should be at least 3 times as many piglets suckling compared to the number of piglets weaned per week, for a minimum weaning age of 21 days. For a minimum weaning age of 24.5 days this figure should at least be 3.5.

Details for these calculations are provided in the background below.

Background

The EU directive 2008/120/EEC demands that "No piglets shall be weaned from the sow at less than 28 days of age unless the welfare or health of the dam or the piglet would otherwise be adversely affected. However, piglets may be weaned up to seven days earlier if they are moved into specialised housings which are emptied and thoroughly cleaned and disinfected before the introduction of a new group and which are separated from housings where sows are kept, in order to minimise the transmission of diseases to the piglets."

For verification purposes on the basis of herd composition (dry sows, lactating sows, suckling piglets, weaned piglets) it is important to know if the multiplier farm is closed. If all sows remain on the farm all the time than the relative 'nursing time' can be estimated based on the sow reproductive cycle. If sows spent part of their (pregnant) time elsewhere and their numbers cannot be used in the estimation, than the 'suckling time' of piglets relative to their entire life time on the farm can be used.

Secondly, please note that the EU directive refers to the age of individual piglets. In practice, as almost all farms manage their sows in batches and not all sows farrow on exactly the same day, the *average weaning* age is often used. To comply with the legal minimum on an individual piglet

level, it can be argued that this means that for weekly batches the average age should be 3.5 days higher than the minimum age. It is not up to EURCAW-Pigs to interpret the legislation on this point. However, we can offer approaches for any minimum average weaning age.

The indicator 'relative nursing time' of sows

This indicator can be used if the farm has an optimal performance in terms of sow fertility and reproductive cycle. If the nursing period of a sow should be at least 21 days, than a full reproductive cycle for a sow is 141 days (gestation being 115 days, minimum nursing period 21 days, interval weaning-conception 5 days). If there are 15% returns to first service, then $(15\% * 21 =)$ 3 days need to be added to the average cycle. Therefore, the ratio between the total number of sows and the number of nursing sows on a farm should be at least 144 : 21.

- This means maximally 6.9 times as many non-nursing sows compared to nursing sows.

If the average suckling period is taken as 24.5 days, than a full reproductive cycle for a sow is 144.5 days (gestation being 115 days, minimum nursing period 21 days + 3.5 days, interval weaning-conception 5 days). Again: add 15% returns to first service (3 days). This leads to a ratio between the total number of sows : the number of nursing sows as 147.5 : 24.5.

- This means maximally 6 times as many non-nursing sows compared to nursing sows.

The indicator 'relative suckling time' of piglets

If the estimate has to rely on information of the piglets only, then there are two options.

If all of the weaners are sold at weaning, or if the weekly number of weaned piglets can be obtained from the farm database, an option would be to relate the number of suckling piglets on a farm to the mean number of piglets weaned or sold per week.

- Given a minimal average suckling period of 21 days, the ratio of suckling piglets to piglets weaned or sold per week should be greater than 3:1.
- Given a minimal average suckling period of 24.5 days, the ratio of suckling piglets to piglets weaned or sold per week should be greater than 3.5:1.

If weaners are kept on the farm for longer (e.g. also as weaners / finishers), then the estimate can be based on the number of piglets born alive every week. From this, the weekly number of weaned piglets can be estimated after correction for pre-weaning mortality. This of course requires the weekly mortality numbers to be available on the farm's database. To check if the minimal weaning age is complied with, the ratio between number of suckling pigs and number of weaned piglets can be calculated as above.