



Strategies to Reduce Preweaning Mortality in Pigs

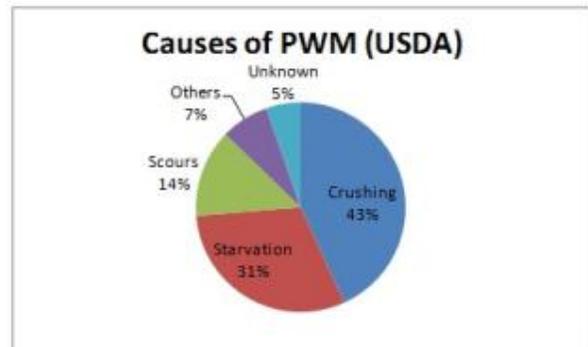
Dan McManus, DVM
Young Animal Specialist - Swine
Land O'Lakes Purina Feed LLC

Prewean mortality substantially depletes the number of Full Value Pigs® (FVP®) in the farrow to finish continuum. Therefore, small incremental improvements in reducing prewean mortality can dramatically improve the % of FVP® in a system.

In 2006, the USDA reported that 12.9% of the pigs born live died prior to weaning¹. The causes of mortality are shown below.

With that in mind, I have observed some very successful strategies that have been implemented by sow farm teams to reduce preweaning mortality. Most farms with low prewean mortality practice strict all-out production in their farrowing rooms and never move older pigs back into rooms with younger pigs. They have excellent cleaning, disinfection and sanitation practices so pregnant animals arrive to an excellent farrowing room environment. Their people keep rooms clean and do not step in crates.

As the farrowing date approaches, someone on the team will do a count of functional teats on each sow and gilt. If they induce sows to farrow, they will not induce until day 116 of gestation. Most of today's genetics will average 116 days of gestation length. Allowing pigs to stay in the sow longer will improve birth weight as pigs grow between 0.1 and 0.2 lbs. per head per day in the sow the last week of gestation². Secondly, colostrum antibodies will increase in the sow as gestation length goes from day 113 to 116³.



As the females are farrowing, team members will dry piglets as they are born. Heat lamps and mats are set to provide a 90-95 degree environment for the pig zone. In order to ensure colostrum intake many farms will split suckle litters. This involves removing the largest ½ of the litter to a warming box and allowing the smallest ½ of the litter to nurse. After 40 minutes, the pigs are switched. The process should only be repeated one more time. Many farms will use a drying agent on the mats to assist in drying piglets at birth and improving crate sanitation. These farms will use oxytocin only when absolutely necessary. Oxytocin will help stimulate uterine contraction during farrowing but will also cause milk letdown and may result in lost colostrum if overused. Many farms will put their small pigs (<2 lbs.) together. The best females for the small litters are the Parity 2 females. Do not use gilts or older sows as they will not work as well on the small pigs.

Fostering- pigs are socially organized within 24 hours after birth. It is important not to disrupt litters after that period. If pigs are falling back at 3-4 days remove them to a nurse sow.

As crushing is the major loss of preweaning mortality, here is a summary of ways to reduce crushing loss in piglets:

- 1) Ensure colostrum intake
- 2) Mats and heat lamps at correct temperature for piglets
- 3) Minimize stress on sows
- 4) Prevent drafts and chilling of newborn pigs
- 5) Dry piglets off
- 6) Keep sows in proper condition during gestation; heavy sows may crush more pigs
- 7) Proper herd parity structure
- 8) Anti-crush crates
- 9) Manage birth weights

If you have a farm that is struggling with getting prewean mortality under control, try some of these practices, they may help.

References

¹ 2006 USDA NAHMS report

² Pinilla, et al, 2008 AASV Proceedings

³ Martineau, 2009