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Care of Pigs From Farrowing to Weaning

John C. Rea

Department of Animal Sciences

The most critical period in the life cycle of a pig is from birth to weaning. On the average, about two pigs per litter are lost during this period. Poor management is the major contributing factor, although the actual cause may be crushing, bleeding from the navel, anemia, starvation or disease.

Weaning large litters of thrifty, heavyweight pigs is a key factor for a profitable swine herd. This publication attempts to outline management practices that help keep pigs alive and profits high.

Preparation for farrowing

The average gestation period for sows is 114 days. To prepare for farrowing, producers should know when sows are due. They also need a method to identify all sows. The gestation table (Table 1) is designed to help producers determine farrowing date based on the date sows are bred.

Table 1

Gestation based on 114-day gestation time

Date bred¹	Due to farrow
Jan. 1	April 25
Feb. 1	May 26
March 1	June 23
April 1	July 24
May 1	Aug. 23
June 1	Sept. 23
July 1	Oct. 23
Aug. 1	Nov. 23
Sept. 1	Dec. 24
Oct. 1	Jan. 23
Nov. 1	Feb. 23
Dec. 1	March 25

¹Farrowing dates for other breeding dates can be easily interpolated. For example, a sow bred Nov. 6 will farrow March 1.

However, producers should be ready for delivery prior to the due date because of individual variation in

gestation.

Newborn pigs have a better survival chance if they arrive in a clean, sanitized farrowing facility. In addition, most producers feel that a break between farrowing reduces disease buildup. Many producers, however, farrow continuously to maximize use of expensive facilities. They must do a top job of cleaning and sanitizing.

A steam cleaner or high-pressure sprayer can be used successfully to clean the farrowing house. Adding a detergent helps remove organic matter. A disinfectant can be applied after cleaning. Cleaning also can be done with a shovel and broom. Floors can be scrubbed using a solution of one pound of lye and 30 gallons of water.

Some producers fumigate, especially those who have had a consistent scours problem in a central house. Directions should be followed carefully and precautions taken to avoid accidents with fumigation.

In addition, the sow should be washed with soap and warm water immediately prior to being put into the farrowing pen.

Care at farrowing

The newborn pig has three basic requirements:

- A good environment;
- Adequate and regular nutrition; and
- Safety from disease and crushing.

Individual attention from the producer at this point pays off with more live pigs. The amount of labor available may determine how much time you spend in the farrowing house. One person in charge of the farrowing works well in larger operations. Attendance at farrowing will pay off in more live pigs but may not be economically feasible. Tables 2 and 3 indicate the scope of piglet mortality and the large proportion of deaths occurring the first few days after farrowing.

Table 2

Piglet mortality of sows and gilts (Lemann and Knudson, 1972)

	Total	Percent of pigs born
Pig death prior to first observation per litter	0.70	7.1
Pig death after the first observation	1.79	18.2
Mean pig death per litter	2.49	25.3
Pig deaths after first observation:		
Crushing	30.9 percent	
Starvation	17.6 percent	
Born weak	14.7 percent	
Chilling	5.5 percent	
Transmissible gastroenteritis	3.9 percent	
Other diarrheas	12.9 percent	
Pneumonia	1.4 percent	

Others	13.1 percent	
Total	100 percent	

Table 3

Death in relationship to time since parturition (Aherne. University of Alberta)

Days from parturition	Number of deaths	Death as percent of total
1	302	46.7
2	77	11.9
3	75	11.6
4	40	6.2
5	19	2.9
6	11	1.7
7	9	1.4
8-14	32	4.9
15-28	39	6.0
29-56	43	6.7
Total	647	100

Management — first few days after farrowing

There are many essential chores to be done shortly after pigs are born. The navel should be disinfected the day pigs are born using tincture of iodine. If possible, equalize litter size. If several sows are farrowing within a 24-hour period, pigs can be transferred successfully from one sow to another. Transfer bigger pigs in the litter, not the runts. Best results occur if pigs are transferred the first 3 days of life and have received colostrum before transfer.

Clip needle teeth, being careful not to crush the teeth or cut the gums. At the same time, tails can be docked. To dock the tails, use the same side-cutter pliers. Leave a stub on the tail about 1/4-inch long. Tail-docking is best done when the pigs are one day old.

Ear-notching is a good practice even in commercial herds. This identification helps select replacement animals from top litters and gives a check on age when pigs reach market weight.

There are many good sources of iron that can be used to prevent anemia. Iron-dextran injected in the muscle is an effective method. Injections in the neck or forearm are preferred to injecting in the ham. Common levels are 150-200 milligrams of iron as iron-dextran, usually given the first 2 to 3 days after birth. Don't give overdoses of iron because it may induce shock. Iron also can be mixed in the feed or in the drinking water. Supplying uncontaminated soil in the pig area is another method of supplying iron but is not used much in today's confinement systems.

Checking the sow's temperature immediately after birth and each 12 hours the first two or three days helps head off problems. This has proven particularly helpful in initiating early treatment for MMA. Temperatures of 104 degrees Fahrenheit and above indicate some action is needed.

Light birth weight pigs present a difficult management problem. Table 4 indicates nearly 60 percent of pigs born under 2 pounds will perish. Table 5 indicates that with extra care and nutrient supplementation, many of these pigs can be saved.

Table 4

Relationship of birth weight and survival¹

Weight range	Number of pigs	Weight distribution of population	Survival
Under 2.0 pounds	1,035	6 percent	42 percent
2.0 to 2.4 pounds	2,367	13 percent	68 percent
2.5 to 2.9 pounds	4,197	24 percent	75 percent
3.0 to 3.4 pounds	5,012	28 percent	82 percent
3.5 to 3.9 pounds	3,268	19 percent	86 percent
4.0 pounds and over	1,734	10 percent	88 percent
Total	17,613	100 percent	(Average) 77 percent

¹From *Pork Industry Handbook*. 1984 litters. Average birth weight of live pigs farrowed 3.0 pounds Iowa Swine Nutrition Herd Performance Data.

Table 5

Survival of nursing pigs dosed with milk replacers¹

Treatment	Control	Supplemented
Number pigs	69	69
Number survived	34	51
Percent survived	49	740

¹Moody et al., *Journal of Animal Science* 25(1966):1250. Nursing pigs under 2.0 pounds orally dosed once or twice daily from the day born to 7 days with 15 milliliters reconstituted milk replacers, 3.2 water: solids ratio.

Management during lactation

Baby pig scours

Baby pig scours are major ongoing problems for swine producers. Most common diarrheas are caused by various strains of *Escherichia coli*, a gram-negative bacteria common to the intestinal tract of all mammals. The symptom of *E. coli*-induced diarrhea is a watery, yellowish stool. Pigs are most susceptible from 1 to 4 days of age, at 3 weeks of age and at weaning.

Although pigs are born with little disease resistance, this resistance increases as they absorb antibodies from their mothers' colostrum. Because pigs' ability to absorb antibodies decreases rapidly from birth, it becomes important that they feed on colostrum soon after birth. Colostrum provides the only natural disease protection they will have until their own mechanism for antibody production begins to function effectively at 4 to 5 weeks. Disease resistance is lowest at 3 weeks. It is wise to avoid unnecessary stress (castration, vaccination, worming) at this time.

In treating common scours, orally administered drugs are usually more effective than injections. You should

use a drug effective against the bacterial strain on your farm.

A dry, warm, draft-free environment is of primary importance in reducing scours. Sanitation is also very important in reducing the incidence of baby pig scours.

Other diseases such as transmissible gastroenteritis (TGE) and swine dysentery may cause more serious diarrhea problems. Contact your local veterinarian if diarrhea persists or does not respond to treatment.

Castration

Boar pigs can be castrated any time before they are 4 weeks old. There is less shock on them at an early age and many producers do this chore the first week.

Creep feeding

In addition to sows' milk, pigs need a creep feed to make maximum gain through weaning. Provide a fresh creep feed at one week of age in a place where pigs can get away from the sow.

A creep ration should be high-quality, complete mixed feed that is eaten readily. Good creep rations can be purchased or mixed on the farm. When creep rations are formulated and mixed on the farm, take particular care to use a high-energy palatable mixture that meets the pig's nutrient needs.

Getting pigs to eat adequate amounts of a creep ration is often a problem. Place the creep feeder in a warm, dry, well-lighted area. Feed small amounts, and feed frequently to keep the ration fresh. Sprinkling feed on the floor or placing it in a shallow pan may help pigs start to eat. Pelleted feeds are usually eaten more readily than meal.

Weaning pigs

Where good management is practiced, pigs are consistently weaned successfully when three to six weeks old in Missouri. Time of weaning depends somewhat on care, facilities and production schedules. Weaning under five weeks of age requires more skill and attention. Warm, dry facilities free from draft are essential.

Pigs weighing 15 pounds or more generally can be weaned successfully regardless of age if they are eating well. It is extremely important to have a dry, heated, well-ventilated, well-insulated house available for pigs weaned early, particularly in bad weather.

Don't start pigs in large groups. Small groups of 20 to 25 head per pen do best. Allow 3 to 4 square feet of space for each pig. Sort pigs according to size and weight.

Parasite control

Monitor your parasite problems by analysis of worm eggs in manure and slaughter checks. Some confinement units have minimal problems with internal parasites. Several good products are available. Recommendations for parasite control are subject to change. Check carefully to see that all products used are current and that limitations on time of use prior to slaughter is observed.

Sow feeding pointers

Good nutrition is important for lactating sows. A 15 percent protein high-energy ration containing adequate vitamins and minerals is recommended. Reduce intake of sows immediately prior to farrowing, or add bulk with one part bran or ground oats to two parts lactation ration to reduce problems with constipation at farrowing.

After farrowing, gradually increase the ration so that the sow is on full feed by seven to ten days after farrowing if she has had at least eight pigs in the litter. Feed a high-energy diet during lactation to support

milk production.

Heavy milk producing sows have difficulty eating enough feed to maintain their condition. More frequent feeding, pelleting and adding fat are techniques to increase energy intake.

Summary

- Have sows and facilities prepared for farrowing.
- Be present at farrowing, if possible.
- Keep pigs warm and dry.
- Process pigs early (navels, teeth, tails, castration).
- Prevent anemia with iron shots.
- Prevent scours.
- Minimize stress at weaning.
- Control parasites.
- Check sows' nutrition.

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Related MU Extension publications

- AED46, Swine Wean-to-Finish Buildings
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=AED46>
- AED47, Alternative Systems for Farrowing in Cold Weather
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=AED47>
- G2505, Universal Ear Notching Systems for Pigs
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