

Cost of serving sows multiple times per breeding

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It is common practice in the pork industry to serve sows two or more times per breeding, as long as the sow is in standing heat. But, is the productivity of the sows served three times per breeding better than that of sows served twice? We posed this question in a retrospective analysis of 33,000 sow histories, from the database of three large production systems, two Canadian and one US.

No matter what the parity, about 60% of sows received two services per breeding. As parity increased from gilts to parity four sows the percentage of sows receiving three services per breeding progressively increased from 6% to ~37%, and remained high until parity 9+. Sows served three times rather than twice per breeding did not produce more subsequent pigs born or born alive in any parity. In fact, sows served three times per breeding produced 0.1 fewer ($P < 0.001$) subsequent pigs born in parities 0 to 4, 7 and 8.

Forty to fifty percent of sows with a wean-to-service interval (WSI) of 0 to 4 d were served three times per breeding. The percentage of sows with a WSI of 0 to 4 d increased with parity from ~30% of parity 1 sows to almost 80% of parity 9+ sows. In the production systems analyzed, serving sows a maximum of three times rather than twice per breeding cost an additional **\$2.30 to \$3.00 per sow bred**, or **\$0.20 to \$0.30 per pig born alive**, assuming an ideal parity distribution. To ensure herd performance does not decline if the practice of serving sows a maximum of twice per breeding is adopted careful attention must be paid to breeding protocols, which must be amended. The practice should focus on sows with WSI less than 5 days, and may not be used on gilts or parity one sows as only a few of these animals were served three times.

Implications: Producers should be aware of the costs associated with serving sows more than twice per breeding. However, before changing breeding practices to serving sows a maximum of twice per breeding (AM, AM), breeding protocols must be amended to ensure performance does not decline.