

**TITLE**

**RETURN TO BASELINE PRODUCTION AFTER A CHANGE OF VACCINATION SUBSEQUENT TO A HIGH VIRULENT PRRS VIRUS STRAIN OUTBREAK**

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**CONTENT**

Background and objectives

PRRS is one of the most damaging diseases in the swine industry. The implementation of the sows and piglets vaccination as well as the 5 Step Programs, have had a significant positive impact on the productive parameters. This study analyzes the evolution of the productive parameters after a change in the control program through the application of 5 Step Program after a high virulent PRRSV outbreak in a vaccinated commercial farm.

Materials and Methods

The study is being conducted in a 2,000 sows farrow-to-wean PRRS positive farm. Sows were being vaccinated with a commercial vaccine on a quarterly basis. In January 2017 there was a PRRS outbreak in the farm affecting both the reproductive parameters and the productive parameters.

In April, the farm started with the Boehringer Ingelheim 5 Step Process Platform which includes two sow mass vaccinations, and vaccination of piglets before weaning. The farm was closed to incoming gilts for 6 months and the McRebel protocol was set up in the farrowing room.

For the statistical analysis the Minitab.17.1.0 software (2013 Minitab Inc.) was used.

Results and discussion

Results of the main reproductive parameters before the outbreak, during the outbreak and after the PRRS control program were:

- Average of abortions/week: 2.46, 16.56 and 2.83.
- Average of piglets born alive/Farrow: 12.25, 10.86 and 12.56.
- Percentage of preweaning mortality: 10.26%, 16.58% and 12.67%.
- Average of piglets weaned/farrow: 10.56, 8.95 and 10.20.
- Percentage of nursery mortality: 8.2%, 18.7% and 6.5%.

The farm recovered the baseline production levels 10 weeks after the implementation of the new PRRS control program.

Conclusions

The setup of the measures included in the 5 Step Process, sows and piglets vaccination was able to reestablish the baseline production in a farm experiencing a severe PRRS outbreak in spite of a systematic vaccination.