

Impact of an PRRS Outbreak in a Sow Herd with Improved Results after Whole Herd Vaccination



I. Von dem Busche¹, E.U. Peitzmeier¹, R. Steens², P.H. Rathkjen³, A.P. Mesu²

¹Veterinary Practice Dr. E.U. Peitzmeier, Hille-Oberlütbe, Germany; ²Boehringer Ingelheim Vetmedica GmbH, Ingelheim am Rhein, Germany;

³Boehringer Ingelheim Animal Health, Ingelheim am Rhein, Germany

INTRODUCTION

In swine herds PRRS outbreaks can provide massive clinical symptoms with reproductive disorders in the sow herd and respiratory disorders in nursery and fattening. This case report describes an outbreak of PRRS and the results of a whole herd vaccination protocol for PRRS implemented in response.

MATERIALS AND METHODS

A 2 site farm system with 125 sows, 400 nursery piglets and 550 fattening places had been vaccinating sows, but not piglets, against PRRSv. A PRRS outbreak occurred in June 2015 with massive reproductive disorders, coughing and increased losses in nursery and fattening. PRRSv was diagnosed by blood samples and necropsies. In response to the outbreak a new vaccination protocol for PRRS was set up with a double mass vaccination of the sow herd (Reprocyt® PRRS EU) Piglet vaccination (Ingelvac PRRSFLEX® EU) was started in July 2015 in the weaning period.

RESULTS

Data were compared for 3 different time periods: before outbreak, outbreak and after the outbreak (Fig. 1, 2). In the nursery unit losses increased to 5% during the outbreak. After implementing piglet vaccination, mortality went down to 1%. A retrospective analysis of the mandatory antibiotic usage reporting system revealed an increase of the antibiotic treatments for nursery piglets during the corresponding time period (Fig. 3).

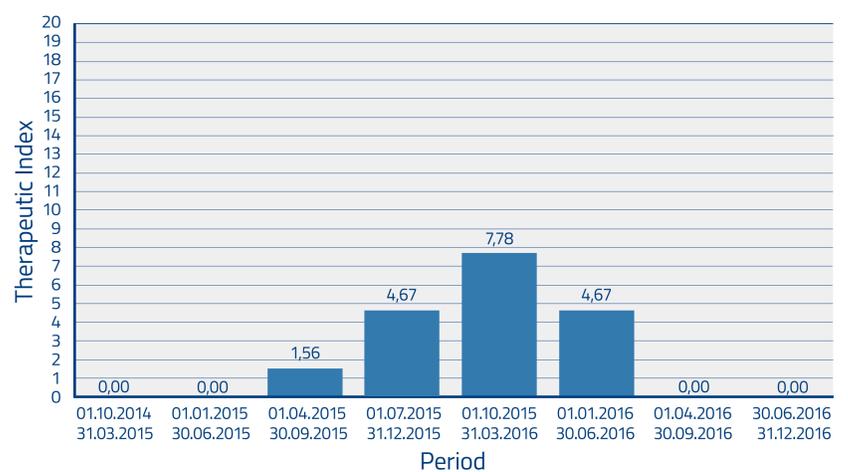
Figure 1: Performance data from the sow unit

Period	01.01.15	01.06.15	01.12.15
	-01.06.15	-01.12.15	-01.04.16
Repeat breeders (up to day 63 of pregnancy)	8,5%	7,9%	2,3%
Repeat breeders incl. abortions (< day 110 of pregnancy)	8,5%	24,4%	16,3%
Farrowing rate	86,2%	69,5%	80,2%
Live born piglets / sow / year	30,4	23,1	28,7
Weaned piglets / sow / year	25,2	19,1	24,5

Figure 2: Performance data from the fattening unit

Period	01.07.14	01.07.15	01.12.15
	-01.07.15	-01.12.15	-07.04.16
Mortality	3,2%	7,4%	3,3%
Feed conversion ratio	2,99	3,7	2,87
Daily growth (g)	802	679	800
Index points (Auto FOM)	0,992	0,976	1,011

Figure 3: Retrospective analysis of the therapeutic index in the nursery (according to QS database)



DISCUSSION AND CONCLUSION

Due to a PRRS outbreak in June 2015 massive reproductive and respiratory disorders appeared in this herd. In November 2015 and March 2016 Influenza was also diagnosed in the herd, this might have potentiated the reproductive disorders at the sow farm. When a whole herd vaccination program against PRRSv was implemented, clinical symptoms and losses were reduced dramatically. Reproductive performance stabilized again after 6 months.

This case report was financially supported by Boehringer Ingelheim Vetmedica GmbH

