Field observation: No PHE complaints after transport of replacement gilts and less use of antibiotics during 3 years of oral Lawsonia ileitis vaccination

#### A. Schuttert<sup>1</sup>, M. Steenaert<sup>2</sup>, N. Wertenbroek<sup>2</sup> <sup>1</sup>De Oosthof, The Netherlands, <sup>2</sup>Boehringer Ingelheim B.V. Alkmaar, The Netherlands

### INTRODUCTION

Ileitis is caused by the bacterium *Lawsonia intracellularis* (Li), found all over the world in pig production systems. The general assumption is that for commercial swine operations it is very hard to become and stay Li free for a prolonged period of time<sup>1</sup>. Porcine Hemorrhagic Enteritis (PHE) is a form of ileitis which is clinically recognized by acute hemorrhagic diarrhea and sudden death of replacement animals and finishing pigs close to market<sup>3</sup>.

# Figure 1: % mortality in replacement gilts (3 to 8 months of age) per quarter of a year

6.0%

This paper describes a field observation in which cases of PHE in replacement gilts were controlled by oral Li vaccination.

**MATERIALS AND METHODS** 

A breeding herd of 330 sows with a conventional health status sells and delivers replacement gilts to 25 different multipliers with variable health statuses. In February 2012 cases of PHE in replacement gilts where reported after transport to multipliers. Oral Li vaccination (Enterisol Ileitis<sup>®</sup>) was started 4–8 weeks before transport, at 22 weeks of age, in all replacement gilts. After an outbreak of PHE early 2013 in gilts before the age of vaccination, an additional vaccination was implemented at the age of 12 weeks. The goal of lleitis vaccination was reduction of PHE cases from 4 months of age until introduction in the sow herd at the multiplier farms.



#### Table 1: Antibiotic use (DDD) per year in gilts (3 to 8 months of age)

	DDD
2011	10.6
2012	11.6
2013	5.0
2014	2.4

Over the same period, less antibiotics were needed: Defined Daily Dosages (DDD)<sup>2</sup> were reduced from 10.6 in 2011 to 2.4 in 2014.

## RESULTS

During 3 years of oral Li vaccination no outbreaks of PHE were reported in vaccinated replacement gilts, specifically after transport to the multipliers. Some PHE outbreaks occurred in gilts from 3 to 8 months of age (before the age of first vaccination), demonstrating continous presence of the disease on farm. A peak in mortality early 2013 was observed in non-vaccinated gilts. While varying during the years, mortality from 3 to 8 months of age in general was below average.

## DISCUSSION

No complaints about PHE after transport were received in any of the gilts orally vaccinated with Enterisol Ileitis® against Li before onset of infection. In addition, less antibiotic treatments were needed during the raising of the gilts. The absence of PHE cases in transported gilts contributed to a sustainable client relationship for the breeding farm and her clients.

## REFERENCES

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