

# LIMITED IMPACT OF PCV2 ON REPRODUCTIVI-TY IN PCV2 UNVACCINATED DANISH SOWS

Lola Kathe Tolstrup<sup>1</sup>, Lars Erik Larsen<sup>2</sup>, Charlotte Kristiane Hjulsager<sup>2</sup>,

Charlotte Sonne Kristensen<sup>1</sup>

<sup>1</sup>SEGES Danish Pig Research Centre, <sup>2</sup>DTU Danish Veterinary Institute

## CONCLUSION

The negative outcome of PCV2 tests of one Danish herd and general difficulties in finding unvaccinated herds with clinical signs indicative of PCV2 may indicate that early stage reproductive failures due to PCV2 infection is not a major problem in Danish sow herds. More controversy, these findings also support the view that PCV2 vaccination is not cost-beneficial in some high-health sow herds.

### **Background and Objective**

A survey performed in 2017 found that only 5 out of 60 (8.3%) of Danish breeding herds vaccinated their sows against PCV2. However, more than 20 mil doses of PCV2 vaccines are prescribed in Denmark every year (Figure 1). Data from laboratory diagnostic submissions have revealed that PCV2 is indeed circulating in a large proportion of Danish sow herds, and vaccination of piglets and gilts is common. PCV2 is seldomly diagnosed as a course of abortion or other late stage reproductive disturbances, but it is unclear, if PCV2 has an impact on the reproductive performance in early pregnancy.

#### Objective

The aim of the present study was to investigate, if sows and gilts that were unvaccinated at the time of insemination were positive for PCV2, and if this decreased the reproductive performance of the sows.

### **Materials and Methods**

Despite a huge effort in contacting herds, only 1 herd met the inclusion criteria of being a PCV2 unvaccinated herd with farrowing rates below 90 and with no other apparent reason for the decreased reproductive performance. The herd was a PRRSV free SPF herd with 2,500 sows. Blood samples were taken from 50 sows 1 week before and 5 weeks after insemination. The samples were tested for PCV2 by real-time qPCR in pools of 10 at DTU Veterinary Institute.

#### Results

Even though there were many Danish herds that did not vaccinate their sows against PCV2, it was difficult to find herds with low farrowing rates where PCV2 was suspected to be the cause. In the herd, none of the pools before and after insemination were tested positive for PCV2.

Since only a few herds seems to vaccinate their sows against PCV2, the use of PCV2 vaccines in Denmark must primarily be used for gilts and piglets.

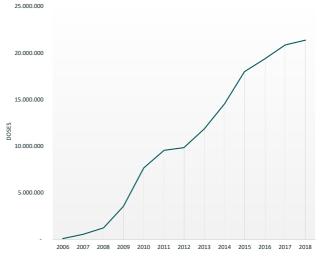


Figure 1. Graphic depiction of the use of PCV2 vaccines in doses during 2006-2018 in Denmark

CONTACT Lola Kathe Tolstrup Livestock Innovation T +45 3339 4428 loto@seges.dk



