

## **VVD-PP-09**

### **TITLE**

**INFECTION PRESSURE OF PCV2 IN 20 FRENCH FARMS AND IMPACT OF THE VACCINATION ON THE EXCRETION.**

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### **CONTENT**

#### **Background and Objectives**

The control of porcine circovirus type 2 (PCV2) associated diseases (PCVD) is based on management strategies, control of the co-infections, and vaccination. Several vaccines are registered and many different protocols including gilts, sows or piglets are implemented worldwide to reduce horizontal and vertical transmission. This survey investigates the infection pressure of PCV2 in various age categories of pigs and the impact of different vaccination's protocol on PCV2 excretion.

#### **Material & Methods**

From December 2017 to March 2018, twenty farms located in the West of France were included in the study. In a single visit, laryngeal swabs were collected from 10 sows and from 2 piglets per sow just before weaning and five oral fluids were taken in pens during the post-weaning and the fattening period (pigs from 6 to 24 weeks-old). All samples were tested individually for PCV2 qPCR.

#### **Results**

Few piglets (5/400 ie 1.2%) from four farms were shedding PCV2 just before weaning. In seven breeding herds, positive PCR results were observed in sows (5.5% positivity in sows). The pair sow-piglet shedding was not systematic. Gilt vaccination seems to prevent the risk of having PCV2 positive sows in farrowing unit ( $p = 0.04$ ) and both gilts and sows vaccination tend to reduce piglets shedding at weaning ( $p=0.12$ ;  $p=0.275$ ). The vaccination of the breeding herd tends also to lower the risk of PCV2 shedding piglets in post-weaning period ( $p= 0,09$ ;  $p=0,27$ ).

#### **Discussion & Conclusion**

PCV2 infection in a herd can be maintained thanks to the presence and the circulation of the virus within the breeding herd and thus shedding by gilts and young sows in farrowing-units. In our survey the prevalence of PCV2 shedding piglets is low at weaning and the vaccination of the breeding herd appears as a key point to control PCV2 infection dynamic.