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#### TITLE

EVALUATION OF PARITY AS A DELAYING FACTOR TO REACH PRRSV STABILITY IN SOW FARMS

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## CONTENT

# Objectives & Background

The time required to wean RT-PCR negative pigs from a sow farm after a porcine reproductive and respiratory syndrome (PRRS) outbreak is an important measure to plan herd closure and manage economic expectations. This time is usually referred to as time-to-stability (TTS). Preliminary data looking at piglet serum and litter processing fluids (PF) testing showed a tendency for lower parity litters to have a higher percentage of PRRS virus positive results. Therefore, this study evaluated whether parity 1 (P1) sow piglets remain PRRS virus RT-PCR positive for longer during herd closure compared to parities 2 (P2) and 3+ (P3+) sow piglets.

## Material & Methods

Nine farms that experienced a recent PRRS outbreak were purposely selected. Litters of P1 (n=15), P2 (n=15) and P3+ (n=15) sows were sampled at processing weekly after a PRRSV outbreak. Processing tissues of each litter were collected in Ziploc bags and sent to the laboratory for testing. Pooled samples per parity per farm were RT-PCR tested.

#### Results

The percentage of positive P1 RT-PCR PF remained at around 20% after the week 30 after a PRRS outbreak in contrast to a decreasing percentage of positive P2 and P3+ PF.

## Discussion & Conclusion

The proportion of positive RT-PCR decreased as weeks after the outbreak increased. However, the RT-PCR positive proportion decrease was more pronounced in P2 and P3+ litters compared to P1 litters. First parity sows may play a role maintaining PRRSv infection, prolonging time-to-stability in some breeding herds.