

# First field evaluation of an innovative tool for systematic PRRSv control – including a modified Holtkamp system – on farms under western European circumstances

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## CURRENT STATUS OF THE PROBLEM

PRRSv is endemic in the Netherlands. The Western European swine industry has specific challenges for implementing a systematic approach, such as: the farm set-up, swine density and farm ownership structure.

## PROJECT OBJECTIVES AND PRACTICAL BENEFITS

The objective of this study is to determine by a field evaluation if a proposed set of tools leads to a farm specific intervention plan directed towards PRRS control.

## STUDY SETUP

10 farms in the Netherlands (in total 20.000 sows) participated in the study. A combination of 3 tools was used: monitoring and classification by a modification of the original and updated Holtkamp system<sup>1,2</sup> to better fit the European circumstances, a biosecurity check (BioCheck UGent) and a decision making tool. The monitoring system is a diagnostic screening method to classify the farms' PRRS status as either unstable (red), stable with presence of PRRSv field strain in nursery pigs (orange) or stable without any PRRSv fieldstrain (green).

## RESULTS

The monitoring system showed that six out of ten farms classified as red at some point during the trial. None of the farms showed a consistent green status.

The biosecurity checks showed that the weakest element of external biosecurity was the location of the farms because 80 % of the farms are located in swine dense areas. The weakest elements of internal biosecurity were: movement of piglets between litters, hygiene in piglet handling procedures, sick piglet handling, use of separate materials between age groups and cleaning and disinfecting of materials and boots.

The most advised farm specific management interventions can be categorised as: prevention of contact between age groups, hygiene and piglet management in the farrowing unit and gilt introduction.

## DISCUSSION AND CONCLUSION

On all farms the combination of the 3 tools lead to a farm specific plan. Subsequently a part of the advice in the plans was actually implemented, in varying degrees between participating farms. Restrictions for not implementing were mainly due to: challenges with staff, time and internal farm design.

## REFERENCES

- <sup>1</sup>Holtkamp DJ et al. Terminology for classifying swine herds by porcine reproductive and respiratory syndrome virus status. *J Swine Health Prod.* 2011;19(1):44–56.  
<sup>2</sup>Holtkamp DJ, et al. Proposed modifications to porcine reproductive and respiratory syndrome virus herd classification. *J Swine Health Prod.* 2021;29(5):pages to be defined.

