

PRRS risk assessment of Dutch sow herds using COMBAT



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INTRODUCTION

COMBAT is a questionnaire tool to assess farm associated risk factors for PRRSV infection, by looking at 4 variables: Internal Risks, External Risks, Management and Location. In this overview we tried to have an insight in the most relevant risk factors for PRRSV infections of sow herds in the Netherlands, using the COMBAT approach.

MATERIALS AND METHODS

In 2017 at 31 farm locations in the Netherlands that housed sows with or without other pig production stages, a COMBAT questionnaire¹ was performed by the consulting vet. Each answer was classified as 'Very high', 'High', 'Intermediate' or 'Low' risk. Risk classifications per variable were compared and answers that represented the most 'Very high' and 'High' risks were selected.

RESULTS

31 sow herd locations in the Netherlands were analyzed. Average number of sows was 802 (range 160 – 2800), all but one had weaned piglets at the same location, 8 had either finishers or raised breeding gilts at the same location. 21 locations were classified as PRRS-unstable (recent positive PRRS PCRs) or had an unknown PRRS status.

Figure 1. Overview of 31 Dutch sow herd locations (grey spots) with regards to Internal and External Risks and average (star). Two locations are used as an example to show results for Location risks (color) and Management risks (bubble size).

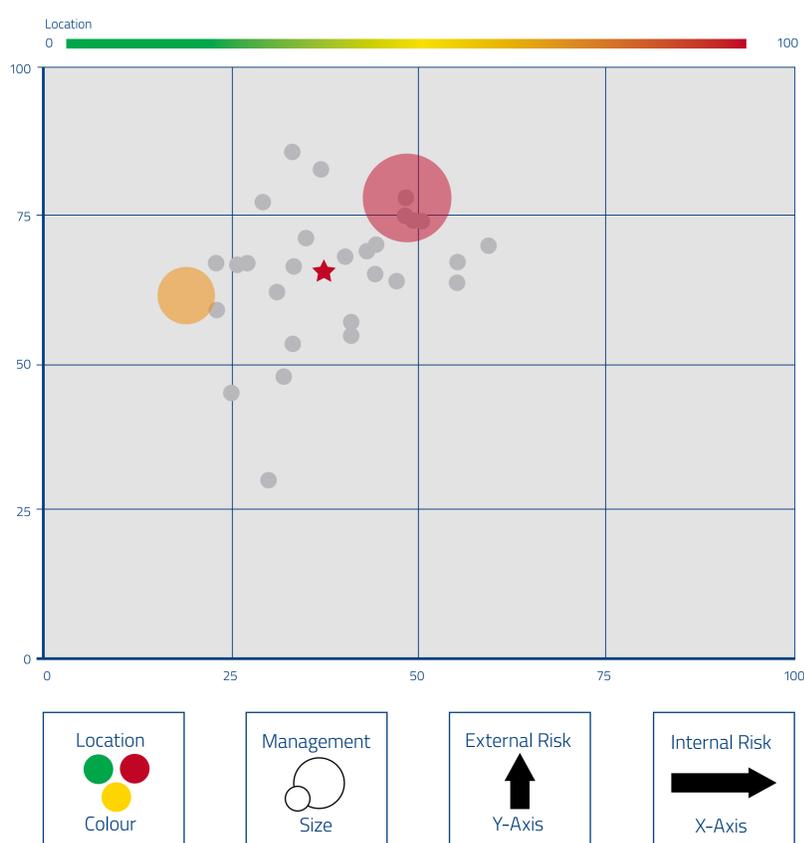
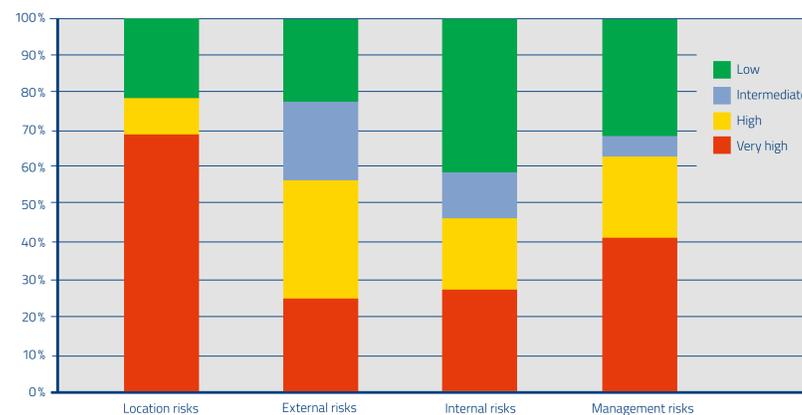


Figure 2. PRRS risk classification overview of 31 Dutch sow herd locations per variable.



Farm Location is a known risk in the Netherlands; 77% of the locations have other pigs kept within 1 km distance and 90% don't know the PRRS status of those pigs. High to very high External Risks are often found. At 84% of the locations the vehicle for animal transport is a risk. All locations have high risk for the collection of dead animals by a third party, which is obligatory in the Netherlands. A very high Internal Risk at 93% of the locations was 'no restriction on movement of employees between areas of production'. Highest Management risks were 'putting lightweights to a younger age group' in 90% of the cases both at weaning and at replacement of weaners to the finishing barn. At 87% of the locations the quarantine period for incoming gilts was 4 weeks or less.

DISCUSSION AND CONCLUSION

This overview shows that PRRSV infection risks in Dutch farms are high. One may discuss if this is due to lack of knowledge and/ or motivation. One would expect that if the Location risk is high, more focus on External risks is the consequence. A strict separation of clean and dirty production areas is necessary, e.g. at the loading bay. As PRRSV survives well in moist conditions² drying trucks before use is an important tool. High pig farm density is a considerable risk for PRRS infections³. Sharing information on pig disease in a region offers a big point of improvement. Farms that do not restrict employees to one area of production can minimize the risk by doing a proper job in changing clothes and boots in between production areas. The very high infection risk of putting lightweights back to a younger production batch is hardly recognized by farmers and often considered as less important compared to 'rescuing individual little piglets'. One should take into account that for good PRRS risk factor advice every individual farm needs a custom made advice and a clear visualization of what might help. For that COMBAT can be used to visualize the farm PRRSV risk status and to discuss points of improvement.

REFERENCES

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