

GILT INTRODUCTION ON DANISH PRRSV POSITIVE FARMS

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Background

PRRS-virus appeared in the Danish pig population in 1992. Since the mid-90s PRRSV type 1 and type 2 have been present.

Objective

An effective gilt introduction program is one of the most important management strategies for controlling PRRSV infections. This study describes the gilt introduction program on 18 Danish sow farms.

Materials and Methods

All 18 farms were identified as porcine reproductive and respiratory syndrome virus (PRRSV) positive; seven farms had the PRRS type 1 strain, four farms the PRRS type 2 strain, and seven farms harbored both PRRS stains. The level of clinical symptoms varied. The farm size varied from 900 to 3,000 sows.

The procedure for gilt introduction was registered along with a farm visit and an on-site questionnaire. On each farm, 15 gilts were selected for blood sampling the day they entered the sow unit. The serum samples were analyzed at the University of Copenhagen for antibodies against PRRSV using ELISA tests, and real-time RT-PCR analyses for PRRSV.

Results

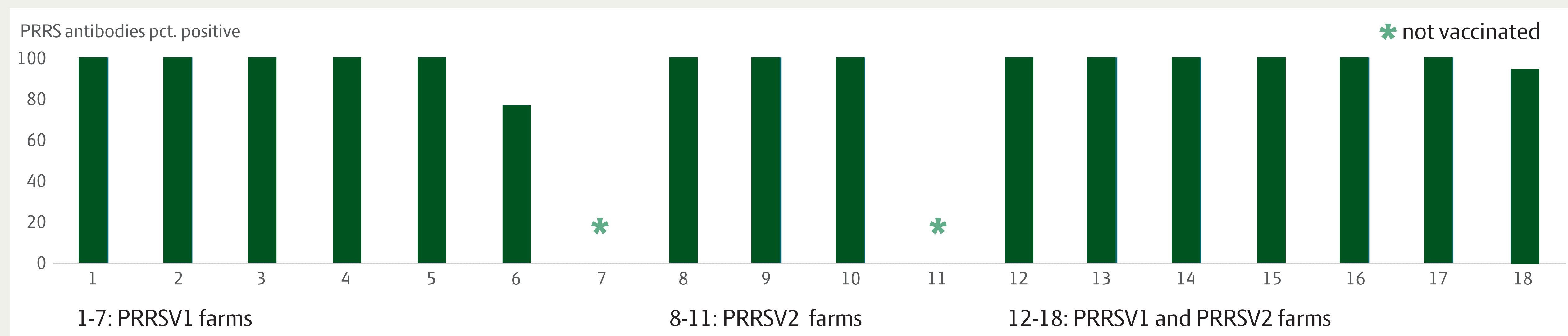
A quarantine for purchased gilts was standard in 16 farms. Two farms produced own replacement animals and did not acclimatize the gilts in a separate quarantine unit.

Eleven of the farms (11/16~69%) had optimal procedures for the quarantine unit. This was defined as all-in/all-out management, separate entrance, and no air contact to other pigs (eg. a door directly to another section). Duration of the quarantine varied from six weeks to 14 weeks, with an average of 10 weeks.

Gilts were purchased from a single supplier on all 16 farms. On arrival at 14 farms, purchased gilts were vaccinated with one or two modified live PRRS vaccines according to the strain present in the farm, and typically revaccinated three weeks later. The gilts were blood-sampled just after the quarantine, at the day of entrance in the sow facility.

The seroresponse in the gilts was 90-100% PRRS-positive at farm level on 13 farms. Only 77% of the gilts were seropositive on one farm. The purchased gilts were not vaccinated on two farms, these gilts had no seroresponse.

None of the tested gilts were PRRSV-positive in real-time RT-PCR.



CONCLUSION

On most farms, an immunization of the gilts was achieved after vaccination with modified live PRRS vaccines. None of the tested gilts showed PRRSV viremia in real-time RT-PCR when entering the sow facility.

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