# The three most likely routes of introduction of PRRS according to 40 Danish veterinarians

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Danish PRRS REDUCTION

## Background and Objective

Porcine Reproductive and Respiratory Syndrome (PRRS) has been present in Danish pig farms for more than three decades. A national reduction plan was launched in 2022. Most Danish veterinarians deal with the elimination of PRRS-virus from pig farms. Managing the routes for disease introduction are pivotal for the success of the national reduction plan. Previous studies have identified animal movements, semen, personnel, equipment, transport vehicles, and aerosols as potential vectors for the transmission of PRRS virus between farms.

## Materials and Methods

Of 143 Danish veterinarians invited for an online survey, 40 (28 %) responded. These veterinarians cover the advisory services in 53 % of all industrialized Danish pig farms (more than ten sows or 100 finisher pigs). Veterinarians were asked to identify the three most probable routes of PRRS virus introduction from a list of ten potential transmission pathways.

## Results

Transmission of the PRRS virus by wind was identified as the most likely route by nearly all veterinarians (n=39). The movement of pigs ranked second, mentioned by 33 veterinarians, while trucks visiting the herd were the third most likely route, noted by 24 veterinarians. The remaining seven routes – manure, semen, tradesmen, vaccines, rodents, equipment, and employees – were each selected by only one to three veterinarians.

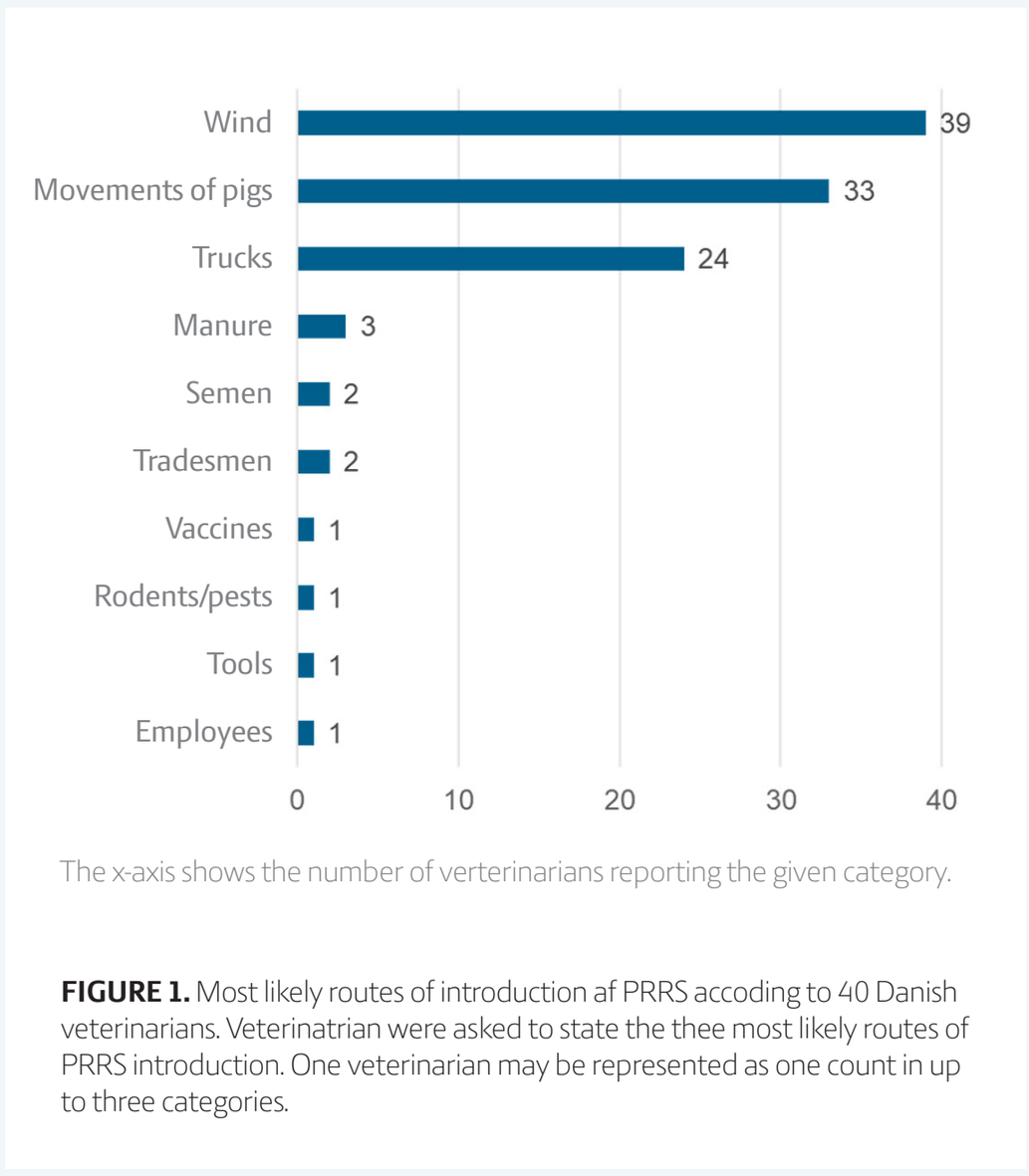
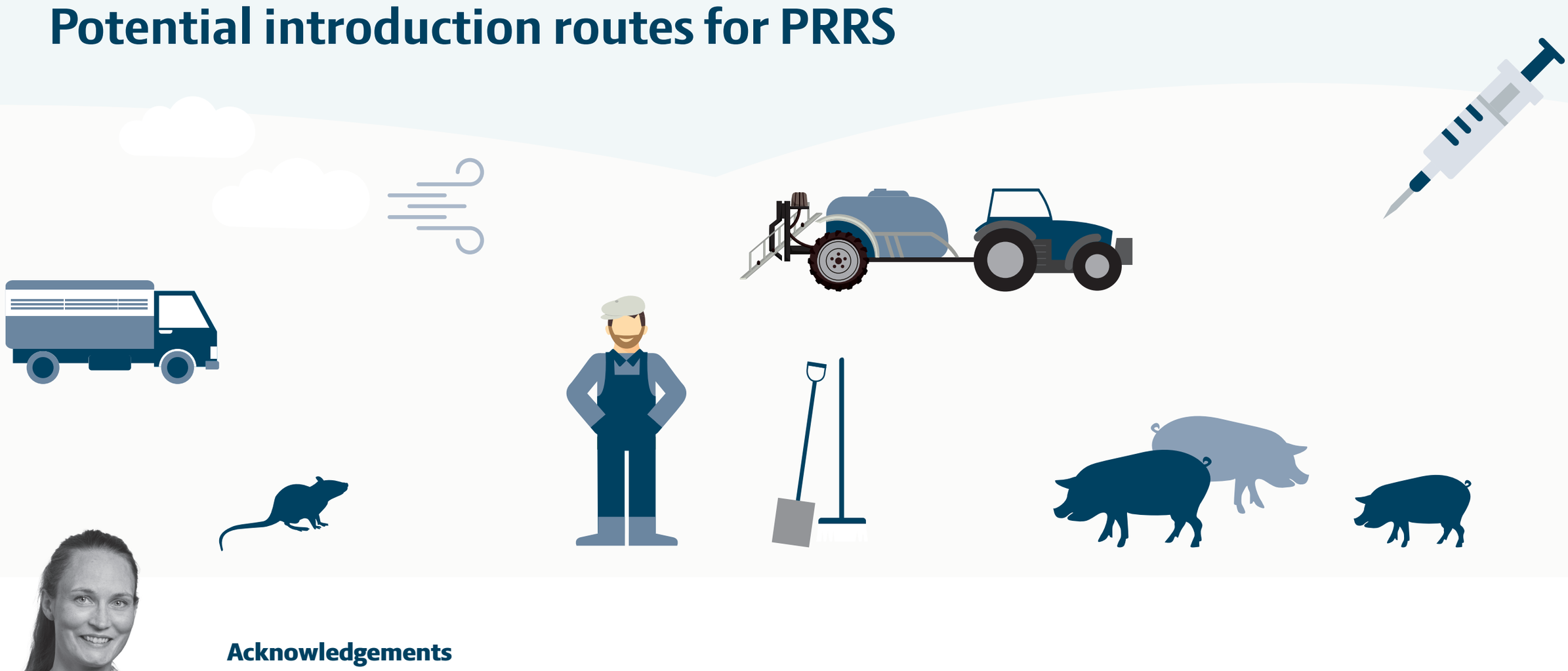



**FIGURE 1.** Most likely routes of introduction af PRRS accoding to 40 Danish veterinarians. Veterinatrian were asked to state the thee most likely routes of PRRS introduction. One veterinarian may be represented as one count in up to three categories.

## Discussion and Conclusion

Beyond the movement of infected pigs, PRRS introduction routes remain unclear. Local spread can occur within 5 km, but delayed clinical signs make it difficult to pinpoint when the virus entered, complicating source identification. Further research is needed to clarify transmission pathways.

## Potential introduction routes for PRRS



**Acknowledgements**

We gratefully acknowledge the veterinarians who responded on the questionnaire.

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SUPPORTED BY Danish Pig Levy Fund

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