

ASSESSMENT OF RISK FACTORS FOR AFRICAN SWINE FEVER IN GAUTENG PROVINCE

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AFRICAN SWINE FEVER

Reports of African swine fever (ASF) in South Africa (SA) date as far back as 1926. In 1935, the ASF control zone were defined in KwaZulu-Natal (northern parts), Limpopo, North West (northern parts) and Mpumalanga (North-eastern parts) provinces. For the first time in 2012, since 1996, an ASF outbreak was reported by the Gauteng Veterinary services outside the ASF control zone. From 2016-2022, South Africa has continued to experience more ASF outbreaks outside its control zones.

AIM & OBJECTIVES

The aim of this project was to study the potential risk of ASF spread to Gauteng with a specific focus on movement of domestic pigs and pig related products with the help of questionnaires.

RESEARCH METHODS AND STUDY DESIGN



STUDY AREA:

Gauteng Province



- Ekurhuleni
- Lesedi
- Tshwane
- West Rand



DATA COLLECTION:

2020-2021

137 Farmers

- Face-to-face questionnaires (Farmers days)
- Telephone interviews
- Online survey

DATA ANALYSIS:

- Comparison of proportions between using chi-squared test :
- •ASF free
- HRA with no ASF reported • HRA with ASF experience
- Statistical significance was set at p < 0.05 • Statistical Analysis System (SAS) ©

FIGURE 1: Summary of research methods used

FACTORS STATISTICALY LINKED WITH ASF AND ATTEMPT AT INTERPRETATION

Do you clean your means of transport?



Routinely used mode of transport for pigs



Health problems during past 6 months?

Washing hands





Cleaning transportation is essential to reduce spread of ASF.

for vehicle or Farmers used pickup more than trucks or walking. Disinfecting vehicles.



statistical association The significant observed could be explained as such: farmers who had these health problems, experienced other diseases that resembled ASF such as pneumonia.

Hand washing decreases ASF risk.

Pig reproduction

Change Boots and clothes for use on farm only

Pig waste

Spraying

Wait 24 hours between visiting any other pig site













In ASF free areas, own boars mostly used tor were reproduction, leading to lower ASF introduction for risk compared to farmers in HRA areas-

More farmers in ASF free areas practiced changing boots and fertilizer poses a risk in the clothes for use on farm only and this minimizes the risk of spread.

The use of pig waste as spread of ASF.

ASF use area disinfection and this in a protecting factor Following ASF experience farmers also use disinfection as they learned or were taught to do it

ASF-free area, more farmers waited 24 hours before visiting any other pig site. Farmers in HRA did not wait and posed a risk of ASF introduction into the farm.

CONCLUSION

Movement of domestic pigs or pigs' related products has the potential risk of spreading ASF to Gauteng. Risk factors the study highlighted in this region: movement of pigs, gaps in both knowledge and biosecurity. Farmers in Gauteng need to be trained on ASF, pig management, encouraged to practice safe feeding practices and costeffective biosecurity measures.

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