Poster Presentation (PF-6)

Risk Factors Investigation of Classical Swine Fever (CSF) in the District of Sikka, Flores Island Indonesia

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INTRODUCTION

The existence of CSF in an area and the potential for introducing the disease into a new area can be associated with the presence of certain risk factors. Identification of these risk factors is important in understanding the transmission of disease and for the development of effective prevention, control and eradication programs. An epidemiological investigation will be carried out on small-holder farmers in the District of Sikka Flores Island, Indonesia. The study is designed to identify factors associated with seropositivity to Classical swine fever (CSF). Classical Swine Fever is a serious and highly infectious viral disease of domestic pigs and wild boar (1). It remains one of the most important transboundary viral diseases of swine worldwide (2).

MATERIAL AND METHODS

A cross sectional study will be carried out on pigs owned by small-holder farmers in the district of Sikka Flores Island, Nusa Tenggara Timor Province, Indonesia. A multistage sampling approach will be used to select subdistricts and villages to be included in the study. Six subdistricts and 12 villages from both high and low risk areas will be included in the study. Simple random sampling method will be used to select farmers to be involved in the study. Random sampling with replacement will be used to select the farmers to interview in the day of survey. Sample size calculator for prevalence studies (version 1.0.01, April 2006) is used to calculate the sample size needed for the study. Questionnaires will be distributed to the farmers in order to identify the possible risk factors associated with CSF infection. The questionnaire will be administered to 41 farmers from each village. Face to face interview will be used to collect data from the farmers. Potential risk factors will be compared with the serology test result against CSF using the Pearson's chi-square test for independence. Univarible analyses and multivariable binary logistic regression will be utilised to analyse the potential putative risk factors and to measure the degree of association between putative risk factors and the

presence of CSF.

Hypothesis for this study is there is a number of factors that can increase the risk of the introduction of CSF and its subsequent transmission with the district of Sikka.

EXPECTED OUTCOMES

- 1. Risk factors associated with the transmission of CSF in the study district will be demonstrated if found
- 2. Publication of papers in high impact journals.

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REFERENCES

- [1] Paton, DJ, and I Greiser-Wilke. 2003. "Classical swine fever-an update." *Research in veterinary science* 75 (3):169-178.
- [2] Blome, Sandra, Christoph Staubach, Julia Henke, Jolene Carlson, and Martin Beer. 2017.
 "Classical swine fever—an updated review." *Viruses* 9 (4):86.