

Arun Chumkaeo 2014: Risk Factors of the Presence of Bats in Pig Farms and Knowledge, Attitude and Practice of Risk Persons on Nipah Virus Infection in Songkhla Province. Master of Science (Veterinary Epidemiology), Major Field: Veterinary Epidemiology, Department of Veterinary Public Health. Thesis Advisor: Miss Waraphon Phimprapai, Ph.D. 237 pages.

The aims of this study were to identify risk factors of the presence of bats in pig farms and to evaluate knowledge, attitude and practice of risk persons on Nipah virus infection in Songkhla province. The cross-sectional case-control study was conducted between July and November 2013 in 6 districts of Songkhla province and data was collected by using questionnaire. Risk factors were analyzed by logistic regression while knowledge, attitude and practice were analyzed by Mann-Whitney U test and Chi-square test. We found that risk factors including appearance of insects, moths, *Azadirachta excelsa*, jackfruit, farm location with radius from farm to cave is about 3.36, 4.18 and 5.075 km respectively in different scenario. Whereas farm located within radius 11.85 km. from forest edge was protective factor. Population at risk including 194 persons were divided into 2 groups, direct contact group (n=42, 21.65%) and indirect contact group (n=152, 78.35%). Our finding indicate that risk factors of the presence of bats in pig farms were almost food source of bats included insects, tree and farm location that related with distance from cave or forest edge. Direct contact group had better knowledge about Nipah virus infection in both general and pathogen more than indirect group ( $p < 0.05$ ). But indirect group knew better about disease situation ( $p < 0.05$ ), however knowledge about disease prevention between two group were not difference ( $p > 0.05$ ). Finally practice of direct contact group had high risk for viral infection.

---

Student's signature

---

Thesis Advisor's signature