

## Case Study of Hog Cholera in Flores 2017 and Its Controlling

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### INTRODUCTION

Hog Cholera disease or Classical Swine Fever (CSF) or also known as Pork Sampar is one of the viral diseases that attack pigs. The virus that causes Hog Cholera is the genus Pestivirus. Hog Cholera belongs to one of 25 types of strategic infectious animal diseases listed in the Ministry of Agriculture no. 4026 / Kpts / OT / 140/4/2013 on the Stipulation of Strategic Disease Infectious Diseases (Kementan 2013).

Hog Cholera disease only attacks pigs and is spread in various countries in the world. This disease attacks all ages of pigs and if not experienced vaccination morbidity and mortality can reach 100% Spread of this disease through direct and indirect contact. Direct contacts between pigs with pigs themselves or between humans in this case workers, visitors or veterinarians who work on these farms with pigs. Indirect contacts can occur through cage equipment, work clothing or transport equipment used such as motorcycles, wagon or truck carrying. The source of the spread of this virus is blood, nasal and mouth fluids, urine, faeces and semen.

Diagnosis of Hog Cholera disease based on clinical symptoms, disease epidemiology, pathology change and histopathology and confirmation of laboratory test result in isolation and virus identification, PCR and serology test result of ELISA and FAT.

Prevention in the form of strict biosecurity applications concerning the traffic of livestock, humans and equipment is needed in the prevention of this disease. In addition Hog Cholera Vaccination is the most effective way to do for the prevention of this disease, especially in Hog cholera endemic areas. Until now Hog Cholera can not be treated antibiotics just to deal with secondary infections.

The first case of Hog Cholera in Indonesia was found in North Sumatra in early 1994 the introduction of the disease was suspected from Peninsular Malaysia. In 1997 Hog Cholera spread to several other areas in Indonesia namely West Sumatra, Riau, Jambi, DKI, Central Java, West Kalimantan, Bali, North Sulawesi, South Sulawesi and East Nusa Tenggara (NTT).

In NTT the Hog Cholera case was first found in Tarus Kabupaten Kupang in 1997 (Santia

et al. 2008). In 1998 the disease has spread to several islands in NTT including Sumba, Rote, Sabu Island and several districts on the island of Timor. In 2002 the disease attacked the islands of Alor, Pantar and Pura. The year 2005 was first found in Flores ie in Sikka district although without the occurrence of outbreak (Diarmita 2011)

### CASE REPORT

The recently case of Hog Cholera outbreak in Flores is reported in 2017. Outbreaks in 6 districts of Flores resulted in deaths in pigs of all ages in large numbers reaching 10,000 heads (PRISMA 2017). The highest case of death was in Nagakeo district (5,600 heads) of Sikka (1,500 heads) of West Manggarai (1,414 heads) followed by other districts. Allegedly the number of livestock deaths is much greater than the amount reported above.

The pigs affected by Hog Cholera experience clinical symptoms such as high fever, lethargy, unwilling to eat, inflammation of the lining of the eye, redness of the skin and partly blue, yellow vomiting, paralysis and ending with death. In pregnant sow occurs miscarriage and mummification, piglet born weak and trembling.

April 2017 BBvet Denpasar investigated cases of pig deaths in Ngada and Nagakeo districts and July 2017 investigations in West Manggarai district with the results of pathology and Virology examination BBVet Denpasar positive to Hog Cholera.

### DISCUSSION

Pigs are an important livestock for the people of NTT who are predominantly Christian. Pigs are used for traditional and religious ceremonies so that pigs have high economic and social cultural values. The pig population in NTT is the highest in Indonesia at 1,871,171 heads (BPS 2016). The pig population on the island of Flores alone is more than 1.3 million birds. However its raising system is largely traditional raising behind the house.

The rigorous application of Biosecurity as well as the proper implementation of vaccination programs is needed for the prevention of this disease on the island of Flores. There are many

obstacles that must be faced with the limited funding sources for the procurement of vaccines, operational staff, counseling, etc. Also public awareness is still relatively low and the readiness of officers that still need to be improved. The geographical terrain of the island of Flores is also a challenge to solve this problem related to logistics and transportation.

All stakeholders are required to work together to tackle this problem on the island of Flores in particular and the province of NTT generally. At this time there has been good cooperation from several parties to handle this problem in coordination by NGO Hivos / PRISMA cooperate with local government element, central government in this case Directorate of Animal Health Director General KH and Animal Husbandry, Nusa Cendana University of Kupang, public figure and doctor association animal monogastrik Indonesia. Hivos / PRISMA parties also invite private sector vaccine factory Hog Cholera to participate in this project. This Hog Cholera epidemic program is underway expected to find the desired result.

Learning from the author's direct experience during the Hog cholera outbreak on the pigs farm of PT.IndoTirta Suaka pulau Bulan in 2006 and managed to overcome this that the rapid diagnosis in the field by the veterinarian is needed by looking at a typical anatomical pathology changes on Hog Cholera then pending the delivery results samples at the Laboratory immediately carried out the isolation of the strict application of biosecurity in the cage that allegedly contracted also other cages. The positive lab results promptly carried out Ring vaccination and continued on all existing pigs and routine vaccination programs were made based on the results of the Hog Cholera titer antibody profiling. Further progressive culling was performed on all pigs that were clinically have sign to Hog Cholera.

## CONCLUSION

Hog Cholera's disease only attacks pigs including strategic infectious diseases given the very high economic loss impacts of exposure to this disease. The rigorous application of Biosecurity and the strict implementation of the Hog Cholera vaccination program are the keys to the success of prevention of the disease.

The traditional Flores pig farming and Flores with difficult geographic and low levels of public awareness and government apparatus make many challenges and need more time and strong cooperation among all stakeholders for the achievement of the free island of Hog Cholera.

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