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Cambodia Pony Welfare Organization

Practical vector control example from Cambodia

Porleng Van



Cambodia Pony Welfare Organization background

- Founded in 2007 by Dr Siraya Chunekamrai and Van Porleng
- **Vision** : A world where human welfare is realized through good animal welfare in South East Asia
- **Mission** : Empower Community in Responsible Animal Ownership

Why ponies : The vast majority of rural communities in the country rely on ponies for transportation and work in the fields where the roads are not accessible by any vehicle. Families depend on ponies for their income and livelihood. **“If something happens to the pony – something happens to the family”**. Therefore... **animal health and welfare impact directly on human welfare.**

- Main Philosophies of Interventions:
- **Clinical Actions:** Treatments
- **Preventive Actions:** Regular visits and follow up
- **Educative Actions:** Workshops and training



Purpose of this report

- To report on measures of vector control in Cambodia
- To highlight the factors that are important for a successful outcome
- To acknowledge the work of Cambodian team and assistance from Thailand as well as knowledge shared from overseas experts
- To suggest ways to keep the region secure from transboundary diseases



Timelines and actions taken by Thai private and public sector

- The initial case in Thailand was detected and reported by the private sector in February 2020. Though not confirmed at the time as AHS, news was relayed through unofficial means via the Thai equine practitioners network to the Cambodia Pony Welfare Organization.
- Once the National Institute of Animal Health in Thailand affirmed the results, the Department of Livestock Development sent news to Cambodian counter part : General Directorate of Animal Health and Production (GDAHP)



At this time Thailand started mapping the outbreak with clinical surveillance and blood testing sent directly to the National institute of animal health (NIAH). Microchipping and nationwide movement control was implemented



Timelines and actions taken by Thai private and public sector

- As the disease in Thailand was being actively recorded an immediate zoom meeting was set up between Thai and Cambodian equine veterinarians.
- The meeting was to explain clinical signs, pathophysiology and importance of vector control
- The proactive approach was necessary as Cambodia has no means to implement similar disease detection via laboratories and would rely only on clinical surveillance and vector control measures
- The following are slides highlighting above

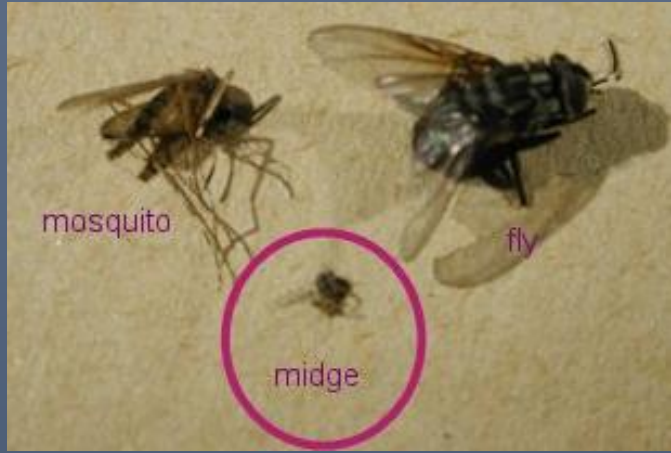


Case used to describe clinical signs



The larger hole mesh was initially used and of course could not prevent the spread of disease which was carried by a tiny midge – so in this picture you can clearly see a dead horse even within the netted area

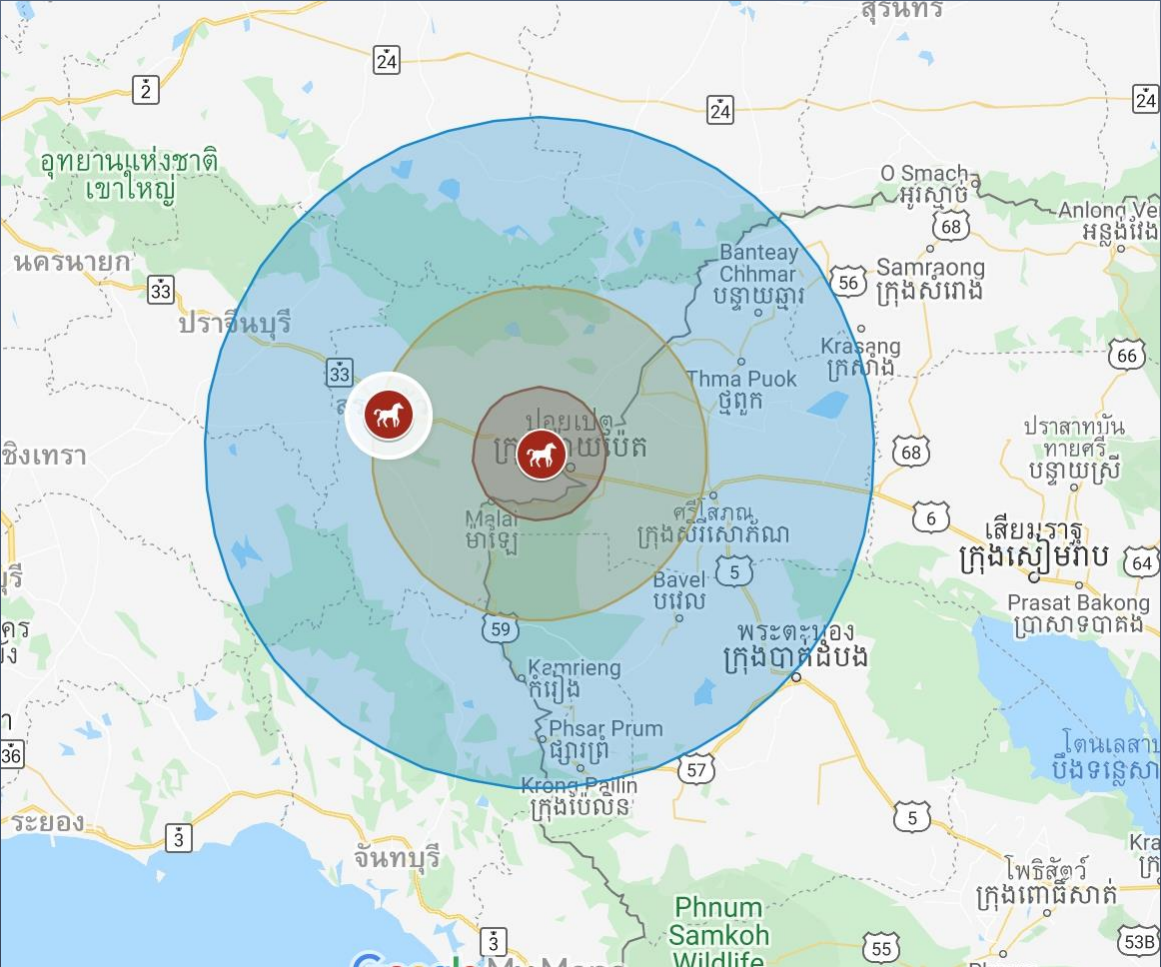




Use of Cypermethrin on nets



Thailand mapped cases and surrounding areas of 50, 100 and 150 kms around each case. The closest to the Cambodian border were cases in Sa Kaeo.



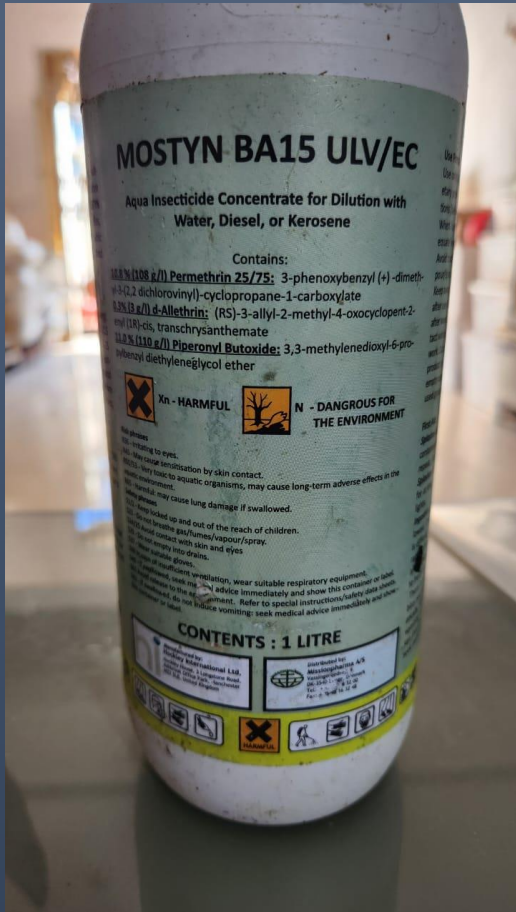
CPWO team contacted and had immediate meetings with GDAH in the adjacent provinces



Appropriate nets were put up with community support

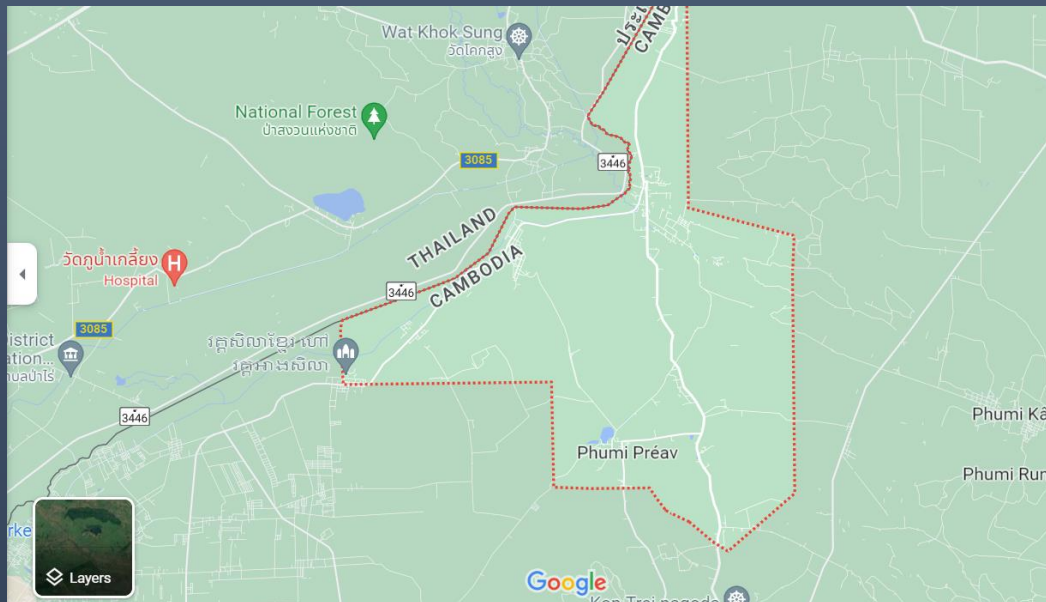


Nets were also sprayed with cypermethrin



Important collaboration

- In the area adjacent to Thai-Cambodia border (Ou Beichoan) in Bantey Meanchey province on April 28 a group of ponies supposedly smuggled across the border were found and detained at the quarantine station



Important collaboration

- A big concern was that there was no method to detect if the animals harbored AHS or not
- Through collaboration with the Thai authorities, blood was taken from all animals and sent to test in Thailand. Results were all negative



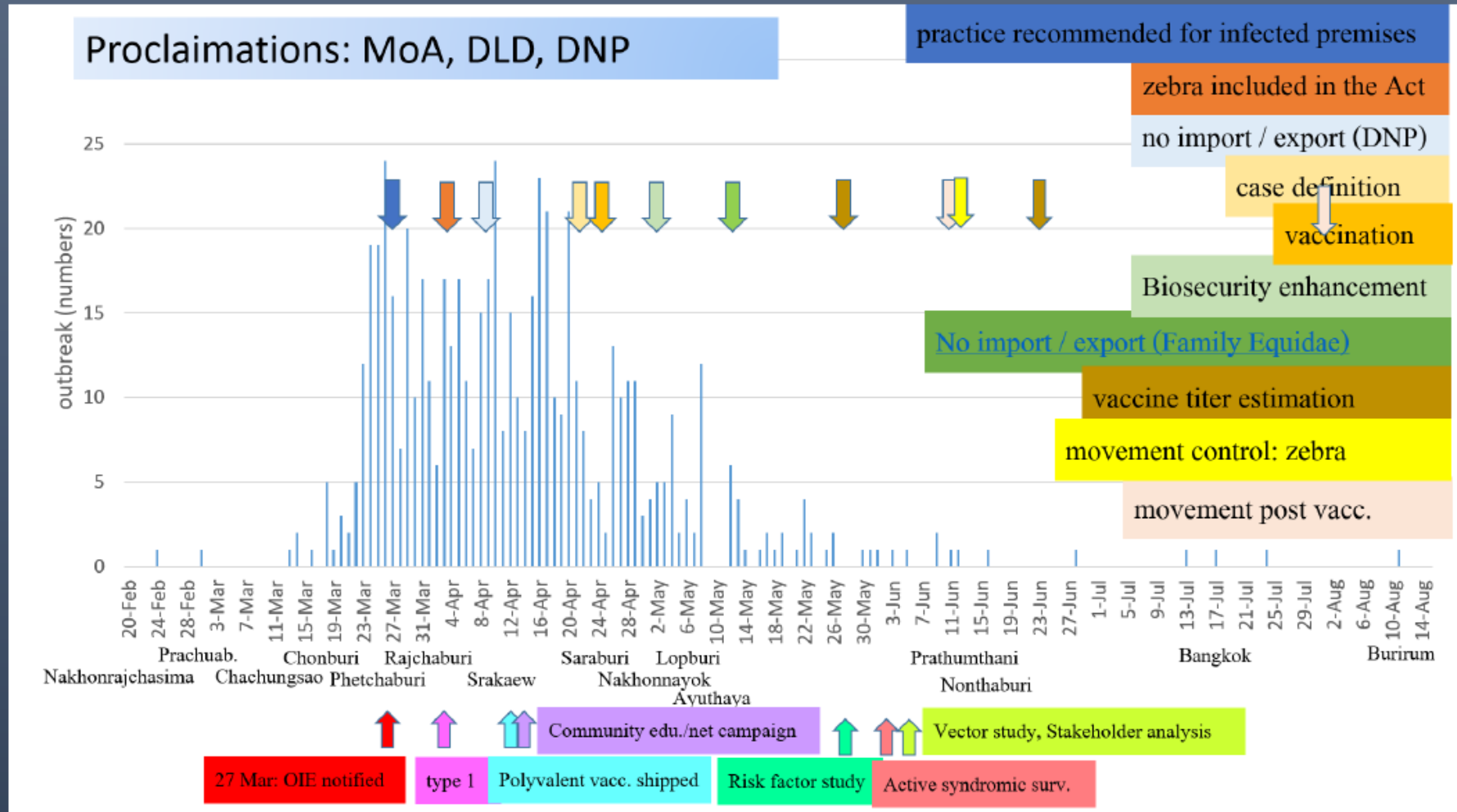
Timelines

- The situation in Thailand was continuously relayed to CPWO with final timelines that showed no further cases were found after September 2020.
- A total of 9 months from Feb 2020-Sept 2020 was the official report for this outbreak
- We are thankful to the swift action on disease detection, vector control and vaccination measure of the Thai private and public sector



AHS timelines in Thailand

Feb 2020-Sept 2020: 8 months



Source: DLD, Thailand

Courtesy of Assoc Prof. Suwicha Kasemsuwan



Factors important to a successful outcome

- Collegiality and collaboration amongst veterinarians within our region both in the public and private sector is essential
- Use of technology for immediate transfer of knowledge and information
- Community engagement and goodwill
- The individuals that contributed to fighting AHS from overseas especially experts who helped the Thai team from South Africa.
- The swift action in sourcing and transporting vaccines for Thailand were important as vaccine procurement would not be economically feasible for Cambodia



Acknowledgements

- Apart from the CPWO veterinarians, GDAHP and WHW (World Horse Welfare) and Thailand counterparts the following experts were key to designing the appropriate actions and should be recognized for assisting in the rapid control of this outbreak: South Africa and the European Union
 - **Prof. Alan Guthrie, Director Equine Research Center, Univ. of Pretoria**
 - **Dr. Camilla Weyer, Equine Research Center, Univ. of Pretoria**
 - **Dr. John Grewar, South Africa Equine Health and Protocols**
 - **Dr. Alf-Eckbert Füssel, EU Commission**



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 - **Assoc Prof. Suwicha Kasemsuwan, Kasetsart University**
 - **Assist Prof. Aree Laikul, Kasetsart University**
 - **Dr. Noppawan Buamithup, Animal Health and Therapeutics, DLD**
 - **Dr. Siraya Chunekamrai, Thai Pony Foundation**

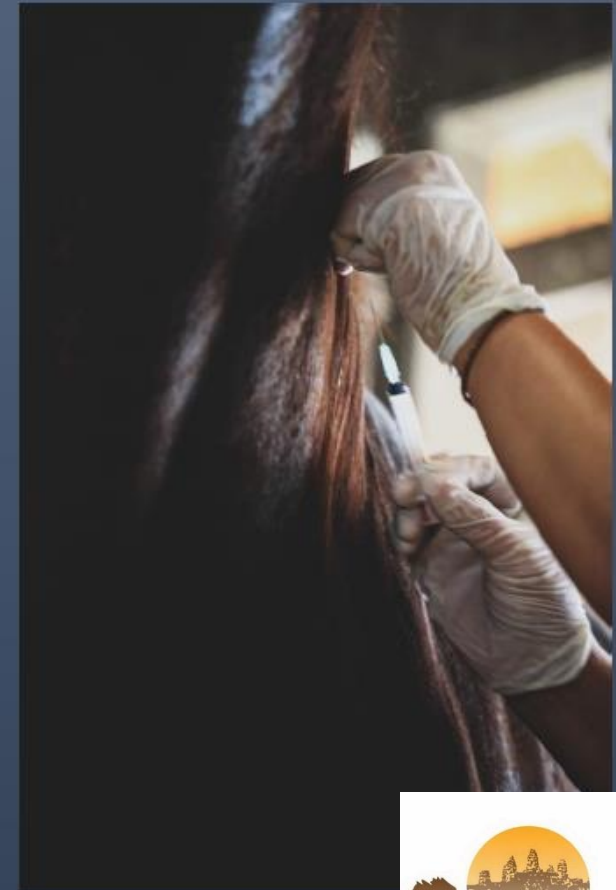




AFRICAN HORSE SICKNESS In Thailand: Feb 2020-Sept 2020



Professor Alan Guthrie



Suggestion to keep the region secure

- Maintain close communication and collaboration within the region
- Have financial assistance from WOAHA for laboratory testing of important diseases in animals that can be sent to Thailand
- WOAHA to have a vaccine bank for important diseases that can be available to low income countries







Thank you

