

**EP0275**

**ePoster Session**

**Travel medicine and international health**

**An outbreak of Japanese encephalitis among Lao people from Xaignabouli, Lao PDR at Nan Hospital, Thailand June - July 2014**

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**Background:** On 12 July 2014, a cluster of 4 encephalitis patients among Lao people treated at 3 hospitals in Nan Province of Thailand was notified. An investigation was promptly initiated to confirm diagnosis, to describe epidemiological characteristics and to control and prevent spread of the outbreak at Thai-Lao border area.

**Methods:** Medical records of the reported cases at all three hospitals (Chaloem Pra Kiat, Pua Crown Prince and Nan) were reviewed. We also interviewed the case's relatives about the exposure and illness in Laos. Active cases finding was done in the hospitals at Nan province. Case definition was a people both Thai and Lao who had fever and change of consciousness during May – July 2014. Blood and cerebrospinal fluid samples were collected for PCR and IgM test for etiologic confirmation.

**Results:** Totally, 4 cases including one death and 3 survived patients with neurological complications were identified. All were Lao people who get infection from Lao PDR and transferred to Thai hospital for treatment. No Thai case was identified during the period. Their ages ranged from 16 to 18 years old but one case was 11 months old. Two were male and 2 each lived in 2 districts of Xaignabouli Province, Lao PDR where locate border to Thailand. The first case was 16-year-old man who had illness onset on 20 June 2014 and was referred from Xaignabouli Hospital to Nan Hospital where his CT brain revealed enhancing lesions at thalamus and midbrain. The remaining cases developed symptoms in Lao PDR on 30 June, 4 July and 15 July 2014. All cases were confirmed positive JEV IgM in CSF and blood samples of 3 survived cases was also positive JEV IgM. CSF PCR was negative for Herpes Simplex and pan-enterovirus. JEV vaccination was implemented in Thailand for EPI programme since 1988 but Lao PDR was not.

**Conclusions:** A lab-confirmed outbreak of Japanese Encephalitis among Lao people occurred during June – July 2014, a rainy season with mosquito abundance, suggesting wide spread of the JE virus transmission in the community at Lao PDR since the symptomatic to asymptomatic ratio of JEV infection was high as 1 : 250. Lao PDR implemented mass JEV vaccination for 1.5 millions of Lao children nationwide, started on 1 April 2015 by GAVI support. For Thailand, Nan Provincial Health Offices started catch-up JEV vaccination at Thai-Lao border area during July to August 2014 with aim to prevent cross-country outbreaks. Joint cross-border investigation should be done for both country benefits.