

**955. An Outbreak Investigation of Influenza among Healthcare Personnel (HCP) in a Tertiary Care Hospital, Bangkok, 2014**

Pasri Maharom, MD, MPH<sup>1</sup>; Anugsumalin Sricharoon, BNS<sup>1</sup>; Duangkamol Chatngern, BNS, MS<sup>1</sup>; Kaimuk Thongyen, BNS<sup>1</sup>; Trish M. Perl, MD, MSc, FIDSA, FSHEA<sup>2</sup>; <sup>1</sup>Somdej Phra Pinklao Hospital, Naval Medical Department, Bangkok, Thailand; <sup>2</sup>Medicine, Johns Hopkins Medical Institutions, Baltimore, MD

**Session:** 115. Outbreaks  
*Friday, October 10, 2014: 12:30 PM*

**Background.** Thailand's 2014 influenza season occurred between January and April. The circulating influenza strains were A (H1N1) pdm09, A (H3N2) and B; all were included in the country's available vaccine. We report an outbreak investigation and describe factors determining disease acquisition, vaccine efficacy and patient impact.

**Methods.** After 4 cases of influenza among HCP were simultaneously identified, we actively looked for influenza-like illness (ILI) among HCP in 4 departments and triage areas. ILI was defined as fever ( $\geq 38^{\circ}\text{C}$ ), and cough and/or sore throat (in the absence of a known cause other than influenza). Influenza infections were confirmed by EIA or RT-PCR technique. A case-control study was undertaken to identify risk factors for acquiring influenza in all staff of these areas. HCP who did not have ILI

were used as controls in the study. Medical records of the patients cared for by staff were reviewed. Patients, not admitted were called by infection preventionists to determine if they had developed an ILI.

**Results.** Forty-five cases were identified among 167 HCP (27%) between February 1 and April 1, 2014. Among these 45, 16 cases (36%) were confirmed with influenza, 13 cases for influenza A and 3 cases for influenza B. There was no difference in attack rate between cases and controls based on gender (male 40% vs 39.3%, OR 1.03,  $p = 0.94$ ), predisposing medical conditions (22.2% vs 18.8%, OR 1.23,  $p = 0.63$ ), or vaccination rate (73.3% vs 66.4%, OR 1.39,  $p = 0.39$ ). Staff who worked in clinical areas had higher risk of acquiring influenza (86.7% vs 66.39%, OR 3.29,  $p = 0.01$ ). We identified a subgroup of patients exposed to HCP with influenza who had operations during the outbreak. Sixty-one cases were contacted and we were able to contact 55 cases (90.2%). We visited 21 cases, reviewed 12 medical records and made 22 phone calls. No ILIs were identified among these patients. After infection control strategies were implemented, 2 more cases were detected within 2 days. No more additional cases were identified after these cases.

**Conclusion.** Early detection of influenza in HCP is an important component of infection prevention strategies. Strictly adherence to these practices can effectively control outbreaks. While, our numbers were small and we could not measure the impact of vaccine compliance, we still encourage all HCP to be vaccinated.

**Disclosures.** All authors: No reported disclosures.