

(HBeAg) among pregnant women. In addition, newborns born to HBeAg -positive mothers received free hepatitis B immunoglobulin (HBIG). Since then, the coverage rate of HBV vaccination and HBIG immunoprophylaxis was about 85–95%. We assessed the impact of the vaccination strategy on the seroprevalence of HBsAg and HBeAg among pregnant women in Taiwan after its implementation.

Methods: We included pregnant women aged 15–45 years who gave birth in 1995 and 2006 for the study. The screening results of serum HBsAg and HBeAg in enrolled subjects were extracted from the National Antenatal HBV Screening information system, a nationwide mandatory reporting system. The proportions of HBsAg and HBeAg positive women from the two cohorts were compared.

Results: The numbers of pregnant women enrolled for the study were 252,335 in 1995, and 145,324 in 2006. The mean ages of the two cohorts were 27.7, and 28.7 years, respectively. The overall prevalence of HBsAg among pregnant women decreased from 16.3% in 1995 to 10.9% in 2006 ($p < 0.001$). The overall prevalence of HBeAg-positive subjects decreased from 4.9% in 1995 to 2.9% in 2006 ($p < 0.001$). In 1995, the prevalences of HBsAg among subjects aged 16–20, 21–25, and 26–45 were 17.4%, 17.2%, and 16.0%, respectively. In 2006, the prevalences of HBsAg among subjects aged 16–20, 21–25, and 26–45 were 3.6%, 8.2%, and 11.7%, respectively.

Conclusion: In Taiwan, the HBsAg- and HBeAg- positive rates among pregnant women significantly decreased after the implementation of HBV vaccination and immunoprophylaxis programs. By continuing the current national immunization strategy to interrupt vertical transmission, we can further decrease HBV infection in the population of Taiwan.

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16.030

Identifying Influenza Among Influenza-like Illness Cases Presented to Emergency Department of a Tertiary Hospital Over One Year Period

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Background: Influenza is a common nosocomial infection and early recognition of cases presenting to hospital is essential in preventing nosocomial transmission.

Objective: At an Australian teaching hospital, we aimed to quantify the proportion of influenza among influenza like illness cases presented to emergency department, characteristics of laboratory confirmed influenza cases and infection control issues in relation to these cases in emergency department.

Methodology: A retrospective review of all Influenza like illness cases presented to Royal Melbourne Hospital Emergency Department from 1st January 2006 to 31st December 2006 was conducted.

Results: A total of 1160 Influenza like illness patients were identified with only 13 laboratory confirmed influenza cases. Only 4.2% of Influenza like illness patients were tested

for influenza. Combination symptoms of fever and cough have positive predictive value of 73% and negative predictive value of 87% for laboratory confirmed influenza. Myalgia did not correlate with a diagnosis of influenza. Majority (85%) of Influenza like illness patients received inadequate isolation in emergency department. Patients were more likely to be tested for influenza during winter season and if they had fever, underlying co-morbidity or a history of recent travel ($p < 0.05$). Decision to isolate patients were influenced by patient's age ≥ 65 years, travel history, underlying co-morbidity and presenting symptoms of fever, shortness of breath and headache.

Conclusion: This study showed influenza cases were likely under-diagnosed and rarely received adequate isolation while in the emergency department. We suggest patients presented with symptoms of fever and cough to emergency department should be put on appropriate and prompt infection control measures as well as be screened for influenza.

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16.031

Risk Factors of Mumps Outbreak in a Primary School, Bangkok, 2007

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Background: On 10th September 2007, the Bureau of Epidemiology received a report of 24 suspect mumps cases in a school. An investigation was promptly initiated with objectives to describe epidemiologic characteristics of cases, to determine risk factors and source of infection and to implement appropriate control measures.

Methods: Active case finding was performed by screening of mumps cases in School A. A suspected case was defined as any person in School A who had swelling/tenderness at one or more salivary glands between 1st August and 15th September 2007. Thirty-nine saliva and urine samples were collected and sent for viral isolation. Anti-mumps IgM antibody was tested in 55 samples. A retrospective cohort was done in 207 grade 6th students. Environmental survey of classroom, cafeterias were carried out. Univariate and multivariate analyses were performed to identify risk factors of infection.

Results: Overall attack rate was 3.0% among students and teachers in School A (57/1899). The highest attack was in 6th graders (14.61%). The median age of cases was 11 years (range 7–27 years). Common symptoms included submaxillary gland swelling, parotid gland swelling, fever,