Government Vaccination Programme (GVP) – Seasonal Influenza Vaccination Programme 2016/17

Every year we face the flu, Vaccinate so it doesn’t get you!

(From left to right) Dr W M Ko (Secretary for Food and Health), Dr H Y Chan (Director of Health), Prof. John C Y Leong (Chairman of HA), and Dr P Y Leung (Chief Executive of HA)

The Secretary for Food and Health, Dr W M Ko, the Director of Health, Dr H Y Chan, the Chairman of Hospital Authority (HA), Prof. John C Y Leong, and the Chief Executive of the HA, Dr P Y Leung all received the flu vaccine at Kwai Chung General Outpatient Clinic (GOPC) on 4 November 2016.

Dr S H Liu, Co-chairman of HA Central Committee on Infectious Diseases & Emergency Response (CCIDER), received the flu vaccine at Alice Ho Miu Ling Nethersole Hospital (AHNH) Specialist Out Patient Clinic (SOPC) on 3 November 2016. In order to protect healthcare workers from the seasonal influenza surge and to reduce the risk of transmitting influenza to patients who are at high risk of complications and mortality from influenza, he encouraged you and your staff to get vaccinated to protect yourself, your patients and your family.

To dovetail the second phase of GVP for 2016/17, community elders aged 65 or above can start receiving the seasonal influenza vaccination at the GOPCs of the HA from 14 November 2016 onwards.

As of 17 November 2016, a total of 12446 HA staff (with an uptake rate of 16.43%) have received the seasonal influenza vaccination.

Current Topics: The second imported case of Zika Virus Infection (ZVI)

On 15 November 2016, an imported case of Zika Virus Infection (ZVI) was confirmed in Hong Kong. This is the second imported case of ZVI since August 2016.

In response to the second imported case of ZVI, an ad hoc CCIDER meeting was held on 16 November, with the following salient points highlighted:

1. **Response level**
   The overall local transmission risk of ZVI is not elevated as the 2nd confirmed case is also imported, thus the Alert Response level is maintained.

2. **Laboratory arrangement**
   - Due to the risk of mosquito-borne disease co-infections, clinicians are advised to order both Dengue and Zika virus tests at the same time for any suspected cases, whereas the chikungunya virus test could be considered separately based on the epidemiological information.
   - The laboratory service for Zika virus testing is currently provided by the Public Health Laboratory Services Branch (PHLSB) during working days, with the exception of urgent testing arrangements for pregnant women with gestational periods close to 24 weeks.

   Initial investigation revealed that the patient had travelled to New York, Antigua and Barbuda, St Maarten and Anguilla before symptom onset. The patient recalled mosquito bites during his stay in Antigua and Barbuda which have been classified by World Health Organization (WHO) as countries / areas reporting outbreaks from 2015.

   The public are advised to adopt strict anti-mosquito measures and safe sex during travel. Pregnant women and those planning pregnancy should not travel to affected areas.

Inpatient episodes with enterovirus infection rebound

Statistics from CDARS indicated that inpatient episodes with enterovirus infection rebounded from below 300 episodes in August and September to 365 episodes in October (Figure 1). Although a similar rebound has been observed in the previous two autumns, the percentage of admissions from elderly patients (>$=75$ years old) increased from the usual of below 0.5% (less than 10 episodes per year, within 2005-2013) to 3.1% (94 episodes) in 2016 (up to October).

Statistics of molecular testing for respiratory viruses from PHLSB showed that while the positive rate of influenza (all types) and rhinovirus/enterovirus have stayed at around 8% and 10% respectively for three weeks, the positive rate of parainfluenza has continuously increased to 5% (Figure 2).

In HA, there are three public hospitals providing cardiothoracic surgery services including Queen Elizabeth Hospital, Prince of Wales Hospital and Queen Mary Hospital. A review on patients with Mycobacterium infection and who have undergone open heart surgery in the past 4 years revealed two patients who had undergone cardiothoracic surgery in QEH were confirmed to have *M. chimaera* infection.

In the event that you encounter any patients who present with symptoms compatible with *Mycobacterium chimaera* infection (eg. fever of unknown origin), and who have undergone open heart surgery within the past 5 years, please remember to send appropriate specimens for *M. chimaera* culture.

**Appropriate specimens include:**
- Blood or bone marrow inoculated into a mycoblytic culture broth bottle for AFB culture
- Tissue for AFB smear and culture

Molecular detection of *Clostridium difficile* on inert surfaces from a Costa Rican hospital during and after an outbreak

A comparison between the detection frequencies of *Clostridium difficile* (C. difficile) DNA on inert surfaces of a major Costa Rican hospital during and after an outbreak was made to confront the knowledge gap created by the lack of study of *C. difficile* epidemiology in hospitals from middle- and low-income countries.

A total of 21 and 54 surface samples were collected during an outbreak and also 2 years post-outbreak, at the same hospital. Qualitative real-time polymerase chain reaction was used to detect a fragment of the *C. difficile* tpi gene on the sampled surface specimens.

Among the 75 environmental samples analyzed, 40% of them detected *C. difficile* DNA. 71% of the samples collected during the outbreak were positive and only 28% of the samples collected 2 years post-outbreak were positive. The results showed that environmental surfaces in the analyzed hospital were continuously being contaminated by *C. difficile* DNA and that their level of contamination is higher during an outbreak than after the outbreak has ceased.

The authors concluded that using real-time PCR to determine the presence of *C. difficile* DNA on surfaces was easy to perform, did not require pre-enhancement and allowed the authors to detect low levels of *C. difficile* DNA in environments that do not appear to be in close proximity to diarrheal patients and on unanticipated surfaces. This study’s results reconfirmed the importance of adhering to strict hygiene procedures and cleaning measures in the control of *C. difficile* transmission in the hospital setting.