

**For information  
on 2 December 2013**

**Legislative Council Panel on Health Services**

**Measures in Prevention and Control of  
Invasive Pneumococcal Disease**

**PURPOSE**

This paper sets out the Administration's measures taken for the prevention and control of invasive pneumococcal disease ("IPD").

**PNEUMOCOCCAL INFECTIONS**

2. Pneumococcal infection is caused by a type of bacteria called *Streptococcus pneumoniae* ("pneumococcus"). There are more than 90 serotypes of pneumococci. Pneumococcus is a common causative agent for middle ear infection and chest infection. It may also cause various forms of IPD, such as meningitis and septicaemia. The infection can be serious or even life-threatening.

3. Pneumococci are commonly found in the nose and throat of healthy people, particularly in children. The bacteria is mainly spread through droplets via coughing, sneezing, close contact with the patient or contact with materials soiled with the bacteria. Young children, elders and persons with weakened immunity or a history of IPD are among the high risk groups of pneumococcal infections.

4. Pneumococcal infections can normally be treated with appropriate antibiotics. However, some of the bacteria have exhibited increasing resistance to antibiotics such as macrolides, making treatment more difficult.

## ONGOING PUBLIC HEALTH MEASURES

5. The Government has been implementing the following measures on an on-going basis for the prevention and control of IPD –

(a) **Scientific Committee on Vaccine Preventable Diseases (“SCVPD”) and its Working Group on Pneumococcal Vaccination (“Working Group”) :**

The SCVPD under the Centre for Health Protection (“CHP”) of the Department of Health (“DH”) advise the government on scientific basis of the public health actions aimed at protecting the community from vaccine-preventable diseases; and review and develop strategies for public health management of vaccine-preventable infections and their risk factors in the light of changing epidemiology and advances in medical science. The Working Group was set up under SCVPD to analyze and surveillance on invasive pneumococcal infections.

(b) **Laboratory Surveillance of IPD:**

From the perspective of public health, an analysis of the trend of various serotypes of pneumococcus is of considerable importance for understanding the overall epidemiological profiles of pneumococcus and for deciding appropriate vaccines to be used. In this connection, DH has set up a laboratory surveillance system targeted at pneumococcus to monitor the local trend of IPD, changes in serotype replacement and antimicrobial resistance. This surveillance system covers all microbiology laboratories in public and private hospitals in Hong Kong.

The number of IPD for children under 5 years old has been relatively stable in the past few years. The number of IPD caused by serotype 3 pneumococcus in children under 5 years old shows an apparent increase in 2013. Among cases under 5 years of age, majority were under 3 years old who were eligible to at least one prior dose of the 13-valent Pneumococcal Conjugate Vaccine (“PCV13”) <sup>1</sup> by the

---

<sup>1</sup> PCV13 contains serotypes 1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F and 23F.

territory-wide Hong Kong Childhood Immunisation Programme (“HKCIP”) in the past.

(c) **Control of Outbreaks:**

According to DH’s guidelines on prevention of communicable diseases, schools or institutions that notice or suspect an outbreak of cases must make early notification to CHP. Upon receipt of notification, CHP will contact the schools or institutions, and as necessary conduct epidemiological investigation, inspection and medical surveillance, as well as provide health advice on preventive and control measures and environmental hygiene.

(d) **Publicity and Risk Communication:**

CHP has all along been monitoring the local epidemiological data on IPD. Letters had been issued to doctors in Hong Kong to update them on the local situation of IPD and guidance on management, including the use of antibiotics, in order to remind them to stay alert of IPD and minimise the impact of disease. Press conference has also been conducted to keep the general public well informed of the latest situation.

(e) **Public Education:**

The Government will also strengthen its messages to the public on maintaining personal and environmental hygiene through a variety of means, including websites, hotline, printed health education materials and Announcements in the Public Interest on television and radio. Support from community partners will also be solicited to disseminate relevant information on preventive measures.

(f) **Vaccination Programmes by DH:**

There are effective vaccines to prevent IPD. The PCV13 vaccine has been incorporated into HKCIP targeting at children aged below two and parents should continue to have their new-born children vaccinated at 2, 4, 6 and 12 months

of age in accordance with the HKCIP schedule.

Elders aged 65 or above who have never received pneumococcal vaccination should receive one dose of the pneumococcal vaccine, and can receive it for free or with a subsidy under the Government Vaccination Programme or the Elderly Vaccination Subsidy Scheme.

## **RECENT DEVELOPMENTS**

6. In the afternoon of 25 November 2013, SCVDP and its Working Group convened a joint meeting to follow up on the two recent fatal cases of children infected with IPD. SCVDP and the Working Group have closely examined the global and local IPD situation, in particular the situation caused by serotype 3 pneumococcus. Based on the currently available information, the joint meeting considered requiring all children under 5 years old who had received 7-valent or 10-valent Pneumococcal Conjugate Vaccines to receive a booster dose of PCV13 was not indicated at this point in time. In addition, as preceding infection with influenza will lead to more severe illnesses caused by IPD, the joint meeting was also of the view that children aged 6 months and above should receive seasonal influenza vaccination unless there is contraindication.

7. Taking into account the SCVDP's view together with concerns across the community and parents, the Government has decided to provide one booster dose of PCV13 for children aged 2 to under 5 years old who have never received PCV13 vaccination. Details are set out in the ensuing paragraphs.

## **CHILDHOOD PCV13 BOOSTER VACCINATION PROGRAMME**

8. The PCV13 booster vaccination will be provided (a) through private doctors by way of a Vaccination Subsidy Scheme and (b) free of charge at the public clinics of the Hospital Authority ("HA") and DH.

### ***Vaccination Subsidy Scheme ("the Subsidy Scheme")***

9. The arrangements of the Subsidy Scheme are as follows –

(a) **Eligibility:**

Hong Kong residents aged 2 to under 5 years old who have never received PCV13 vaccination are eligible for one booster dose of PCV13. Those who have already received PCV13 vaccination do not need to receive it again. Parents may bring their children to participating private doctors registered under the Subsidy Scheme for the PCV13 booster.

(b) **Operation:**

The Government will be responsible for procuring PCV13 and supplying them to participating private doctors. The Government will reimburse the participating private doctor with a \$50 injection fee for each dose of PCV13 vaccination through the e-Health system. However, as in other existing vaccination subsidy schemes, the Government will not prohibit the participating private doctors from charging additional fee other than the injection fee. A list of the participating private doctors and the additional fees charged by them would be uploaded onto CHP's website. Pricing poster will also be displayed at the clinics of the participating private doctors.

(c) **Duration of Subsidy Scheme:**

The Subsidy Scheme is expected to be launched in the later part of December 2013 and completed on 30 June 2014.

(d) **Procurement of vaccine:**

The Government has liaised with the supplier of PCV13 to ensure that there are sufficient vaccines to meet local needs. According to information provided by the supplier, there is sufficient stock of PCV13 vaccine in Hong Kong at present and more vaccines will be sent to Hong Kong in early December 2013.

### ***Booster Vaccination at Public Clinics***

10. In addition to the Subsidy Scheme, starting from 2 December 2013, free PCV13 booster vaccines will be provided at public clinics under HA for eligible children with chronic medical problems attending hospital clinics.

11. Since 2 December 2013, DH's Maternal and Child Health Centres will also provide free PCV13 booster vaccines to eligible children from financially vulnerable families who are Comprehensive Social Security Assistance Scheme recipients or holders of valid Certificate for Waiver of Medical Charges.

### **WAY FORWARD**

12. As indicated above, the Government aims to launch the Childhood PCV13 Booster Vaccination Programme by phases in December 2013. A press conference was held in the afternoon of 29 November 2013 to inform the public of the above plan. Preparation work is well under way and we will make further announcements on the implementation details in due course.

13. In parallel, the Government will also step up dissemination of related information to the public, including information on the prevention of IPD and the use of pneumococcal conjugate vaccine.

14. The Government will also continue to maintain vigilance to IPD. As preceding infection with influenza will lead to more severe illnesses caused by IPD, we will also enhance preparedness for the winter influenza peak season. This is only possible with the collective effort of the community. We will continue to promote the existing vaccination programmes and step up publicity to promote awareness on personal health, environmental hygiene and infection control to the community.

### **ADVICE SOUGHT**

15. Members are invited to note the contents of the paper.

**Food and Health Bureau  
Department of Health  
November 2013**