

Legislative Council Panel on Health Services

Prevention and Control Measures against Measles

Purpose

This paper sets out the measures adopted by the Government to prevent and control measles.

Background

2. Measles is a highly infectious disease caused by the measles virus. It can be transmitted by airborne droplet spread or direct contact with nasal or throat secretions of infected people, and, less commonly, by articles soiled with nasal or throat secretions. Generally speaking, affected persons will present initially with fever, cough, runny nose, red eyes and white spots inside the mouth. This is followed three to seven days later by a red blotchy skin rash, which usually spreads from face to the rest of the body. The rash usually lasts four to seven days, but can persist for up to three weeks leaving with brownish staining and sometimes fine skin peeling.

3. A patient can pass the disease to other people from four days before to four days after the appearance of skin rash. The incubation period normally ranges from seven to 18 days, but can be up to 21 days. Affected persons should avoid contact with non-immune persons, especially those with weakened immunity, pregnant women and infants. Although there is no specific treatment, drugs may be prescribed to reduce the symptoms and antibiotics may be used to treat bacterial complications.

4. The incidence rate of measles in Hong Kong has decreased substantially since the introduction of measles vaccine in 1967. In this connection, the Regional Verification Commission for Measles Elimination in the Western Pacific of the World Health Organization (“WHO”) confirmed in 2016 that Hong Kong had achieved the interruption of endemic measles virus transmission.

Prevention and Control Measures

5. The Government has taken a series of measures to prevent and control measles infection –

Vaccination

6. Vaccination is the most effective way to prevent measles. Measles vaccination has been in use in Hong Kong for about 50 years. Since 1967, measles vaccination has been incorporated into the Hong Kong Childhood Immunisation Programme (“HKCIP”), under which a dose of measles vaccine is given to infants aged six months to one year for free. From 1997 onwards, two doses of vaccine are given to children for free, one at one year old and the other at Primary 1. From July to November in 1997, the Department of Health conducted the Special Measles Vaccination Campaign, under which a dose of measles-containing vaccine was given to over a million children and youngsters aged one to 19¹ who had not received the second dose of vaccine.

7. Generally speaking, it is expected that the majority of the people born before 1967 in Hong Kong already have antibodies against measles from previous infections. Those who have received two doses of measles-containing vaccine, including the majority of the people born in 1985 or after and attended primary school in Hong Kong, will normally have sufficient protection against measles. As revealed by the findings of the territory-wide immunisation surveys regularly conducted by the Department of Health, the two-dose vaccination coverage has been consistently maintained at well above 95%, and the local seroprevalence rates of measles virus antibodies reflect that most of the people in Hong Kong are immune to measles.

Enhancing Surveillance, Timely Control and Announcement of Test Results

8. Hong Kong has a well-established notification system of measles, with effective epidemiology and laboratory surveillance. The Government will take prompt actions in case of cases or outbreak of measles infection. According to the Prevention and Control of Disease Ordinance (Cap. 599), measles is one of the 50 statutory notifiable infectious diseases in Hong Kong. All registered medical practitioners are required to notify the Centre for Health Protection (“CHP”) of the Department of Health (“DH”) of all suspected or confirmed cases of these diseases for the purpose of disease control.

¹ Those born between 1978 and 1996.

9. Upon receiving notification of measles cases, the CHP will immediately commence epidemiological investigations to identify potential sources of infection and high-risk exposure, and notify relevant medical facilities and institutions so as to take follow-up investigations and control measures. Besides, the CHP will trace the patients' contacts in order to provide them with relevant health advice and information and put them under medical surveillance. Based on the information obtained after epidemiological investigations, the CHP will timely recommend taking further specific measures to reduce the risk of spreading the disease, including providing measles vaccination to those who required one.

10. At present, the CHP's Public Health Laboratory Services Branch is responsible for measles virus testing. Application of the laboratory tests and experiment results is to be jointly assessed by clinicians and microbiologists. Their assessment will be based on the patient's epidemiological and clinical history and the time interval from exposure to the vector to onset of symptoms or seeking of medical attention. A report on preliminary positive/negative test result can normally be issued within one day upon receipt of the test sample, while a report to confirm diagnosis will take one more day. To keep the public informed of the latest situation, the CHP has been reporting through press releases the latest developments in its investigations into measles cases and the follow-up actions being taken.

Enhancing Port Health Measures

11. To prevent the spread of infectious diseases into Hong Kong, the Port Health Office of the CHP has been carrying out health surveillance at all boundary control points, including the Hong Kong International Airport ("HKIA"), seaports and ground crossings, with the use of infrared thermal imaging systems for body temperature checks on inbound travellers. Suspected cases of infectious diseases will be immediately referred by the Port Health Office to healthcare facilities for follow-up. Upon receiving notification of a confirmed measles case, the Port Health Office will notify the airline concerned so that thorough disinfection will be carried out on the aircraft on which the patient travelled.

Liaison with other Health Authorities

12. The International Health Regulations (2005) is an international legal instrument binding on all member states of the WHO, including the People's Republic of China, and therefore extends to cover Hong Kong. The CHP has been closely communicating with the WHO as well as overseas and neighbouring health authorities and monitoring the latest developments regarding measles virus infection overseas. Moreover, the CHP has been

maintaining close communication with the health authorities of Guangdong and Macao on the surveillance of measles virus infection to enhance the notification and communication mechanism for exchanging information about preventive and control measures in the future. The three parties agreed to strengthen their co-operation on the prevention and control of the disease and notify each other in case of any cases.

Health Advice, Publicity and Public Education

13. The CHP recommends members of the public who are planning to travel to places with high incidence or outbreaks of measles to review their vaccination history and past medical history, especially people born outside Hong Kong who might not have received measles vaccination under the HKCIP. Those who have not received two doses of measles-containing vaccines, with unknown vaccination history or with unknown immunity against measles are urged to consult their doctor for advice on vaccination at least two weeks before departure. Pregnant women and women preparing for pregnancy who are not immune to measles as well as children aged below one who are not due for the first dose of the Measles, Mumps and Rubella combined vaccine under the HKCIP are advised not to travel to places with outbreaks of measles.

14. To increase the public awareness of measles virus, the CHP has all along been producing various health education materials in different languages, such as leaflets, booklets and posters, for distribution in the community. A dedicated webpage on measles virus has also been launched on the CHP website to provide updates about the disease, give travel advice and answer frequently asked questions.

Latest Measures

15. In view of the recent surge in measles cases, the CHP and the Hospital Authority (“HA”) have taken the following enhanced measures –

Hong Kong International Airport and its Staff

16. Upon confirmation of the measles outbreak at HKIA, DH carried out risk assessment immediately. First of all, the CHP has set up vaccination stations at the HKIA since 22 March to provide vaccination for people working there who are non-immune to measles. Starting from 1 April, vaccination for eligible airport staff has been provided to the following target groups –

- (a) those born in or after 1967, and have not received two doses of measles vaccination, and have not been infected with measles before, and with

evidence of living with infants under 1-year-old or living with pregnant women; or

- (b) those with laboratory evidence of testing not positive against measles antibody (IgG).

17. To prevent further spread of the disease at the HKIA, the Government has been working closely with the Airport Authority Hong Kong to implement prevention and control measures at HKIA (including the enhancement of the ventilation system and remind the food business operators and food handlers to pay more attention to personal, food and environmental hygiene so as to ensure cleanliness on the premises and food safety). Besides, starting from April, the DH has been providing measles serology test service to airport staff who were born in or after 1967 to identify those who need the measles vaccination. Priority will be given to staff belonging to target group (i.e. those mentioned in paragraph 16(a)).

Frontline Healthcare Staff of the HA

18. The Central Committee on Infectious Diseases and Emergency Response of the HA convened ad hoc meetings on 25 March, 3 April and 8 April, joined by representatives from the CHP, to discuss the risk assessment and preparedness of public hospitals. The meeting agreed that measures need to be implemented for early diagnosis and isolation of possible measles cases and to provide vaccinations to staff in need, including those who have never been vaccinated or those with inadequate immunity, to reduce the risk of nosocomial infections. Earlier the HA issued notifications, as well as updated information on measles, to remind frontline healthcare staff to be vigilant towards patients with symptoms of measles. Suspected cases will need to be reported and treated under isolation, with specimens sent to the CHP for testing. In addition, the HA has enhanced the infection control measures, including enforcing the cleansing and disinfection in patient wards as well as enhancing ventilation. Patients and accompanying persons are also reminded to wear masks at the Accident and Emergency Department of hospitals.

19. The Staff Measles Vaccination Programme (“SMVP”) of the HA was commenced on 1 April. Vaccinations are provided to staff working in high risk departments, including Paediatrics and Adolescent, Obstetrics and Gynaecology, Haematology, Clinical Oncology, Bone Marrow and Organ Transplant Units, Intensive Care Units and Infection Disease/Isolation Wards in the first phase. In view of the latest risk assessment, the HA has already extended the SMVP to include the healthcare staff of the HA working at the Accident and Emergency Departments and General Out-patient Clinics triage and fever areas.

Foreign Domestic Helpers

20. The CHP recommends that all foreign domestic helpers (“FDH”) who are non-immune to measles should receive vaccination, preferably before they arrive in Hong Kong. If they could not receive in time, they can consult doctor after they have arrived in Hong Kong. The CHP has already issued letters to all FDH employment agencies in Hong Kong to inform them of the above recommendations. Relevant information has also been uploaded to the dedicated webpage on measles on the CHP website and the Labour Department’s information portal for FDH. In view of the recent surge of measles cases, the Secretary for Food and Health and the Commissioner for Labour have again appealed the Philippine Consulate General and all FDH employment agencies in Hong Kong in late March.

Way Forward

21. The Government will stay vigilant, strengthen the surveillance and keep itself abreast with the latest developments of the measles disease. In addition to the ongoing risk assessments, the Government will step up public health measures as appropriate. We will also enhance publicity to keep the public informed and alert so that they can take suitable precautions and response measures where necessary.

Advice Sought

22. Members are invited to note the content of this paper.

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