

Stay Vigilant against Measles

In view of local surge of measles cases, staff should take note of the following key measures to prevent measles transmission in healthcare settings.

1. Be alert of the clinical symptoms of measles, travel history and epidemiological linkage i.e. contact of a confirmed measles case or workers at the Hong Kong International Airport (HKIA).
2. Airborne precautions: confirmed measles cases should be isolated in Airborne Infection Isolation Room (AIIR) for 4 days after the onset of rash. Healthcare workers should wear a N95 respirator before entering the patient room. If the patient is discharged during the infectious period, the room should not be used for at least 30 minutes to up to 2 hours if possible, depending on the actual ventilation setting of the room.
3. Universal masking: all staff and visitors should wear surgical masks while entering patient care areas.
4. Reinforcement in hand hygiene and environmental hygiene. Pay extra attention to equipment disinfection e.g. portable X-Ray machine.
5. Staff Measles Vaccination Programme (SMVP) has started.

Please visit the designated webpage of [measles](#).

**預防麻疹
訪客應注意**

**Prevention of Measles
Important Notice to Visitors**

如有發燒、咳嗽、流鼻水、眼紅或皮疹，
請勿到醫院探訪
Please do not visit when you have fever, cough,
runny nose, red eyes or skin rash

進入病人護理區，
必須戴上口罩
Wear a mask when entering
patient care areas

探病前後，必須洗手
Clean your hands before and
after your visit

每次只限2名探訪者
Limit to 2 visitors at a time

多謝合作
Thank you for your cooperation

Latest Epidemiology of Measles

Local situation

Between 1 Jan and 3 April 2019, a total of 43 cases (27 males and 16 females) of measles were confirmed in Hong Kong (figure 1). Majority of the cases were reported since March 2019. Eighty-six percent of cases had no documented evidence of measles vaccination; 56% had travel history during the incubation period (IP); and 44% were not born in Hong Kong. The characteristics are summarized in table 1.

Twenty-one of the cases were found with an epidemiological link to the recent measles outbreak at the HKIA, including 17 workers at the HKIA and 4 workers of a local airline. Two small household clusters involved 2 adults and 2 infants under one year old. Three of them had travelled outside Hong Kong during the IP. One healthcare worker of HA was affected. Case investigation and contact tracing are in progress.

Figure 1: Epidemic curve of measles cases in 2019 (by date of rash onset)

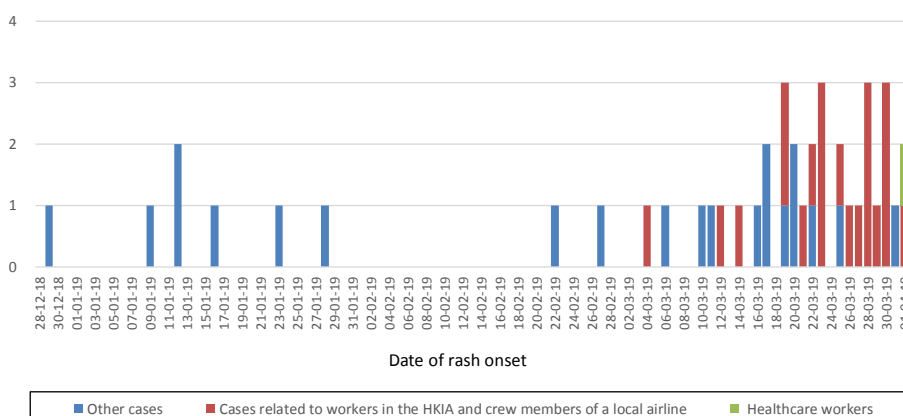


Table 1: Characteristics of the measles cases:

| Characteristics | Number |
|---------------------------------|--------|
| Sex | |
| Male | 27 |
| Female | 16 |
| Age | |
| 0 – 11 months old | 3 |
| 7 – 18 years old | 1 |
| 19 – 34 years old | 22 |
| 35 – 52 years old | 17 |
| Travel history during IP | |
| Yes | 24 |
| No | 19 |
| Place of birth | |
| Hong Kong | 24 |
| Non-local born | 19 |
| Measles vaccination | |
| Vaccinated (2 doses) | 6 |
| Unvaccinated | 8 |
| Unknown | 29 |
| Outbreak at the HKIA | |
| Related cases | 21 |
| Not related cases | 22 |
| Admitted to HA hospitals | 39 |

Global situation

Many countries are experiencing a resurgence of measles. Outbreaks were reported not only in endemic regions, but also in countries with successful interruption of transmission such as the United States. According to the Centre for Health Protection (CHP), the 12-month measles incidence (number of cases per million population) in Hong Kong was 4.9, which was much lower than other countries in Southeast Asia. The 12-month measles incidence in the Philippines, Malaysia and Thailand were 155.9, 86.4 and 81.0 respectively. A very high incidence was observed in Greece among the European countries.

Local herd immunity against measles

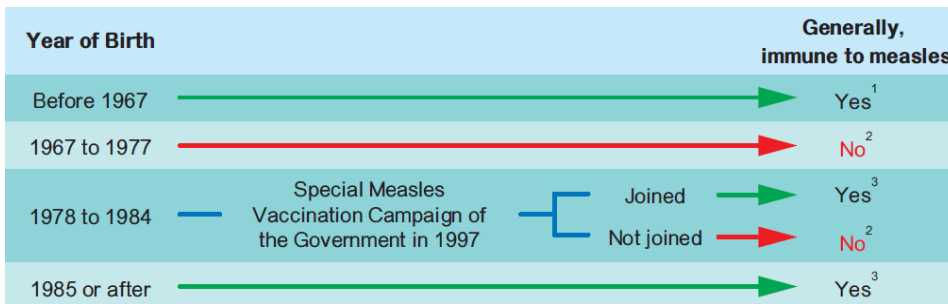
According to the information provided by the CHP, the majority of the people born before 1967 in Hong Kong already have antibodies against measles from previous infections. People who were locally born between 1967 and 1978 are considered as partially protected against measles due to their single dose measles vaccination, whereas majority (74%) of people who were locally born between 1979 and 1984 had received two doses of measles vaccines. People who were locally born in or after 1985 should have received two doses of measles vaccine and the overall vaccine effectiveness has reached 97%. The overall vaccine coverage rate of measles vaccination has maintained at a high level and the local seroprevalence rate of measles virus antibodies (98%) reflects that most of the people in Hong Kong are immune to measles.

Table 2: 12-month measles incidence

| Countries | 12-month incidence per million population |
|------------------|---|
| Philippines | 155.9* |
| Malaysia | 86.4 |
| Thailand | 81.0 |
| Indonesia | 16.9 |
| Vietnam | 12.6* |
| New Zealand | 9.2 |
| Singapore | 8.2 |
| Japan | 3.3 |
| Greece | 154.5 |
| Italy | 44.3 |
| France | 43.3 |
| United Kingdom | 14.3 |
| Hong Kong | 4.9 |

*Data was up to 9 Jan 2019

Figure 2: CHP – Are you immune to measles?



- Majority of those who were born before 1967 in Hong Kong have contracted measles in the past
- May have only received one dose of measles vaccine
- Should have received two doses of measles vaccine

References:

- CHP - Daily Update on measles situation in Hong Kong. https://www.chp.gov.hk/files/pdf/daily_update_on_measles_cases_in_2019_eng.pdf
- CHP & IDCTC - Ad hoc Clinical Infection and Public Health Forum: Situation Update of Measles in Hong Kong. <http://icidportal.home/Trainings/View/142>
- CHP - Thematic webpage of Measles <https://www.chp.gov.hk/en/features/100419.html>

Influenza activity keeps dropping while hMPV and rhinovirus/enterovirus are on increasing trend

Positive rate of influenza (all types) has been continuously decreasing since after week 3, from 30.1% (peak in week 3) to below 10% in the recent two weeks (8.1% in week 13, figure 3). The daily number of new influenza cases identified in HA since 30/12/2018 also dropped to around 50 cases per day (figure 4). Meanwhile, the positive rate of hMPV has been increasing from around 1% in week 5 to 5.2% last week and positive rate of rhinovirus/enterovirus is also rising to above 10% in the recent three weeks.

Figure 3: Overview - Specimens tested and positive rate of different viruses

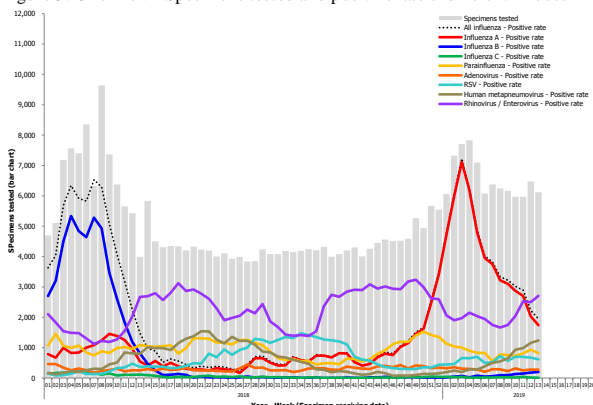


Figure 4: Daily number of new influenza cases identified in HA since 30/12/2018

