

### Latest Epidemiology of Measles

As of 16 May 2019, there were a total of 73 cases of measles infections (45 males and 28 females) in Hong Kong, aged from 8 months to 49 years.

Since the last update in this newsletter, 7 new cases were reported. Five of them, aged from 25 to 31 years, were workers at a retail shop in Tsim Sha Tsui. Onsets of rash were between 10 and 13 May. Another 2 cases were a 27-year-old woman with travel history to Philippines during incubation period and a 47-year-old local-born man.

Besides, a previously reported case of a 2year-old girl (case no. 63) was tested positive for vaccine-associated measles and is thus excluded from confirmed cases of measles.



Reference: 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

# **Imported Case of Monkeypox Infection in Singapore**

On 9 May 2019, the Ministry of Health in Singapore reported an imported case of monkeypox infection, involving a 38-year-old Nigerian tourist who arrived on 28 April for a workshop. He is currently warded in an isolation ward and is in stable condition. He had consumed bush meat in Nigeria which could be a possible source of transmission of the monkeypox virus (MPXV). Twenty-two closed contacts have been offered vaccination to prevent the disease or reduce the severity of symptoms. They are also under quarantine.

Monkeypox virus is a member of the Orthopoxvirus genus in the family Poxviridae. Monkeypox infection is a rare viral zoonosis disease with the first human case was identified in 1970 in the Democratic Republic of Congo (DRC). Since then, the majority of cases have been reported in rural, rainforest regions of the Congo Basin and western Africa, particularly in the DRC. Sporadic cases of monkeypox have been reported from west and central African countries. The first reports of the virus outside Africa were confirmed in the United States in 2003. In 2017, Nigeria experienced the largest documented outbreak of monkeypox. Last year, 3 cases of monkeypox were reported in Britain and 1 in Israel.

The incubation period is usually from 6 to 16 days but can range from 5 to 21 days. Symptoms include: fever, intense headache, lymphadenopathy, back pain, myalgia, and an intense asthenia. Skin rashes appear often beginning on the face and then spread over the body and peripherally to involve palms and soles. These lesions evolve from maculopapules to vesicles, pustules, followed by crusts in about 2-3 weeks. The case fatality in previous monkeypox outbreaks has been between 1% and 10%. Supportive care is the mainstay of treatment while use of cidofovir or other new antivirals is still under investigation. There is no specific vaccine although smallpox vaccination has been found to have cross protection against monkeypox and thus has been used as postexposure prophylaxis in controlling 2003 US outbreak.

Although monkeypox is not a notifiable disease in Hong Kong, any suspect case should be informed to the Hospital Infection Control Team immediately. A combination of standard, contact and airborne precautions should be applied.

Reference: WHO - Monkeypox https://www.who.int/news-room/fact-sheets/detail/monkeypox



Photo from CDC Public Health Image Library

# CICO's Biweekly Update

## **Hospital Infection Updates - Enterovirus and Mycoplasma Infections**

Diagnosis data of HA inpatient records indicated that the numbers of enterovirus and mycoplasma infection have been increasing since March (figure 2 and 3, respectively). The majority of the infected cases were children. May to July is traditional peak season of enterovirus infection and upsurge of mycoplasma infection usually lasts for a few months.

Figure 2: Hospitalization episodes with enterovirus infection by admission age

Figure 3: Hospitalization episodes with mycoplasma infection by admission age



# **Current Topic: Human Metapneumovirus (HMPV)**

HMPV can cause upper and lower respiratory infection in people of all ages, especially among young children, older adults, and people with weakened immune systems. Clinical presentations include cough, fever, nasal congestion and shortness of breath. It may progress to bronchiolitis or pneumonia. HMPV can be transmitted by contacting with respiratory secretions from infected cases or contaminated surfaces and objects. The incubation period is 3 to 6 days. There is no specific treatment for HMPV infection.

#### Hospital Outbreaks Caused by HMPV

In view of the recent increasing trend of HMPV infections (figure 4), the hospital outbreak records were reviewed. From 2016 to 15 May 2019, there were 13 hospital outbreaks attributed to HMPV, including 3 in 2016, 1 in 2017, 6 in 2018 and 3 in 2019. Relatively more outbreaks were observed from March to June (figure 5). Among the 13 HMPV outbreaks, 54% occurred in psychiatric wards, 23% in mentally handicapped or disability wards, and 23% in infirmary wards. A total of 106 patients and 30 staff were affected. Among the 106 affected patients, 58% were male and 42% were female, age ranged from 4 to 92 years.

Infection control in these settings faces some challenges due to the characteristics of the patients. The patients may not be able to maintain personal hygiene nor report sick when symptoms occur. Whenever an outbreak is confirmed, it is necessary to early identify any other possible cases among patients and staff. Medical surveillance should then be conducted to observe relevant symptoms among the contacts. It is also important to confirm that appropriate infection control measures are in place to prevent primary and secondary cases and make recommendations for action when necessary.



Figure 4: Number of positive results and positive rate - Human metapneumovirus (HMPV)



Figure 5: Monthly HPMV outbreak, 2016 to 15 May 2019



Reference:

CHP. Review of Human Metapneumovirus Infection in Hong Kong. CDW, vol. 15, no. 14 https://www.chp.gov.hk/files/pdf/cdw\_v15\_14.pdf