



Feature:
HFMD and EV71 infection in Hong Kong - update
Review of listeriosis in Hong Kong, 2004-2010

LENS ON CHP



Above: The delegation from Mainland China attached in CHP from May 23 to 27, 2011, to exchange the experience of prevention and control of communicable diseases.

NEWS

A case of human myiasis

On May 23, 2011, the Centre for Health Protection (CHP) recorded a case of human myiasis affecting a 62-year-old man who lived in a private residential building with his wife. He was a diabetic and suffered from complications of peripheral vascular disease with chronic ulcer at his left ankle. Gangrenous change of left foot was detected in April 2011, but the patient refused surgical treatment. Maggots were found at the base of the ulcer by community nurse during home visit. The patient was admitted to a public hospital on May 11 for management. Taxonomical identification of the insect specimen confirmed dipterous larvae belonging to the family *Muscidae*. The patient was all along in stable condition.

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Hand-Foot-Mouth Disease (HFMD) and enterovirus 71 (EV71) infection in Hong Kong - Update

Reported by DR PRISCILLA SY WONG, Medical Officer, Enteric & Vectorborne Disease Office, Surveillance and Epidemiology Branch, CHP.

In Hong Kong, the activity of HFMD and EV71 infection usually peaked in May and June (Figure 1). As expected, an increasing number of HFMD outbreaks and EV71 infection was recorded since May this year.

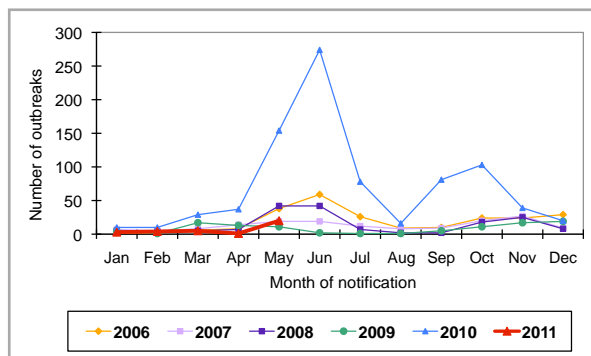


Figure 1 - Monthly number of HFMD institutional outbreak(s) in 2006 to 2011 as of May 31, 2011.

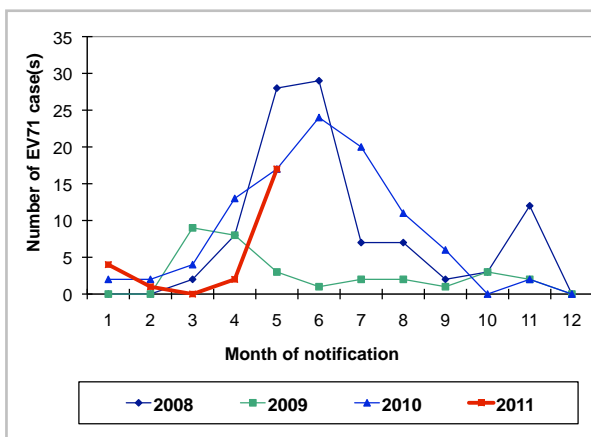


Figure 2 - Monthly notification(s) of EV71 in 2008 to 2011 as of May 31, 2011.

As of May 31, 2011, a total of 24 cases of EV 71 infection were recorded so far this year. Seventeen cases were recorded in May as compared with 0 to 4 cases recorded in the past four months. The number of cases in May this year was lower than the corresponding period of 2008 (Figure 2).

Majority of EV71 cases occurred in children. Their ages were ranged from 2 months to 19 years (median: 2 years) with 15 males and 9 females affected. Twenty cases presented with typical HFMD or

herpangina symptoms while the remaining four cases presented with non-specific symptoms like cough, fever, runny nose, rash, shortness of breath and pharyngitis. Fifteen cases were locally acquired, 6 cases were

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imported from Mainland China, 1 case was imported from Indonesia and 2 cases were unclassified as the patients spent part of the incubation period outside Hong Kong. Thirteen cases required hospitalization with length of stay ranging from 1 to 7 days (median: 3 days). All cases recovered uneventfully except one fatal case involving a 14-month-old boy who died of meningoencephalitis in February. No other complications were recorded this year.

As of May 31, 2011, there were 33 HFMD institutional outbreaks (27 kindergartens/ child care centres, 3 primary schools, 1 secondary school and 2 residential home) recorded by Centre for Health Protection (CHP). Twenty outbreaks occurred in May as compared with 5 and 1 in March and April respectively. A total of 158 students were affected. Three HFMD school outbreaks were confirmed to be caused by EV71, one recorded in January and the other two occurred in May this year. A total of 23 children (15 males and 8 females) were affected in these three outbreaks and all of them were stable without complications. Two kindergartens were subsequently advised to suspend classes for two weeks. Among all HFMD outbreaks, eight of them had laboratory confirmation. Apart from three EV71 HFMD outbreaks, three HFMD outbreaks were associated with coxsackie A virus and two were associated with enterovirus which could not be further subtyped.

The activities of HFMD and EV71 are expected to remain active for coming summer months and CHP will keep monitoring of the situation. For weekly updated figures of HFMD outbreak and EV71, please refer to "EV scan" published by CHP on every Friday.

<http://www.chp.gov.hk/en/index.html>

Review of listeriosis in Hong Kong, 2004-2010

Reported by DR YH TAM, Medical Officer, Field Epidemiology Training Programme, Surveillance and Epidemiology Branch, CHP.

Between June 2004 and December 2010, the CHP recorded a total of 72 cases of listeriosis in Hong Kong. Cases were voluntarily reported by clinicians before July 2008. Fewer than 10 cases per year were reported in 2005 and 2006, but the number started to rise in 2007. Listeriosis was made notifiable in July 2008 and the highest number of 17 cases was recorded in the same year. The number of cases gradually dropped in the following years and only 6 cases were recorded in 2010 (Figure 1). The cases occurred all over the years; no obvious seasonal trend was observed (Figure 2).

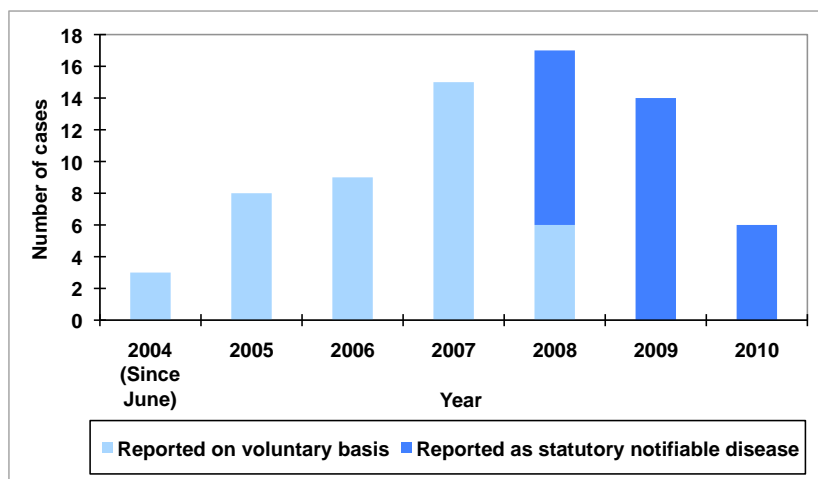


Figure 1. Number of listeriosis cases recorded in June 2004 to December 2010.

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A domestic outbreak of whooping cough

On May 22 and May 24, 2011, CHP recorded a domestic outbreak of whooping cough. A newborn baby girl, who was not yet due for the first dose of pertussis vaccine, presented with cough and post-tussive vomiting since May 5 (27 days old). She attended several private clinics but her symptoms persisted despite treatment. She was admitted to a public hospital on May 20 and PCR testing of her nasopharyngeal swab showed the presence of *Bordetella pertussis*. She was treated with antibiotics and remained in stable condition. The baby was taken care of by a 55-year-old helper who presented with cough since May 12, about one week after onset of symptoms of the baby girl. Her symptoms subsided after receiving a course of antibiotics from a private clinic. Her pernasal swab taken on May 23 was tested positive for *Bordetella pertussis* by PCR. The baby's mother also had cough since April 28, about one week before onset of symptoms of the baby girl. Her symptoms persisted for about two weeks but pernasal swab taken on May 23 was tested negative for pertussis. The other home contacts of the baby were all tested negative for pertussis and were given chemoprophylaxis. The patients did not travel outside Hong Kong recently.

Laboratory surveillance on multi-antimicrobial resistant bacteria (April 2011)

The Microbiology Division of the Public Health Laboratory Services Branch (PHLSB) provides diagnostic microbiology laboratory services and receives referred isolates from various laboratories for confirmation and characterization testing. Laboratory surveillance on various multi-antimicrobial resistant bacteria has been undertaken to monitor the epidemiology and to inform on public health measures. The latest data has been uploaded to the CHP's website:

http://www.chp.gov.hk/files/pdf/MDR_Lab_surveillance_20110421_Eng.pdf

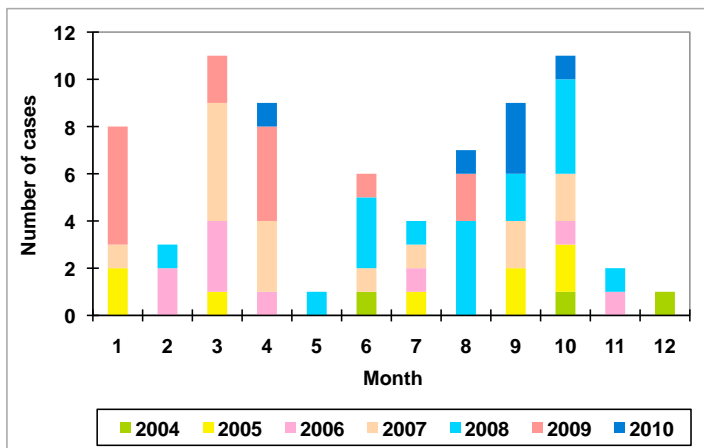


Figure 2. Number of listeriosis cases by month of disease onset recorded in June 2004 to December 2010

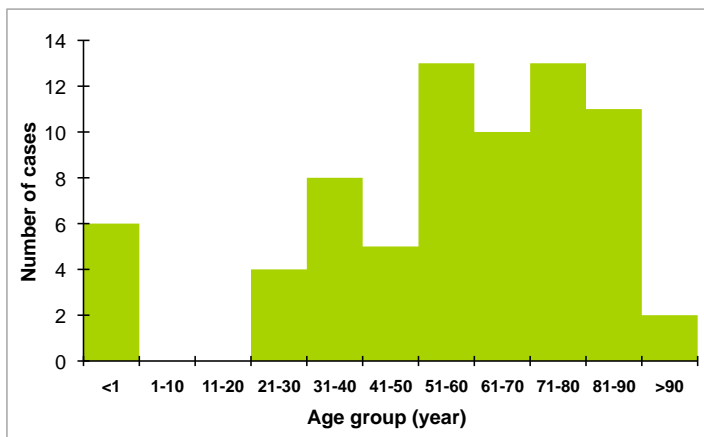


Figure 3. Age distribution of listeriosis cases recorded in June 2004 to December 2010

not infected after laboratory testing. There were 4 other newborn cases whose mothers were not diagnosed with listeriosis before delivery. They presented with foetal distress upon delivery or developed fever and sepsis within 1 week after birth. One baby boy had severe meconium aspiration syndrome and passed away despite resuscitation, while the other babies recovered after intensive care.

Listeriosis accounted for the death of 4 cases and the case-fatality rate was about 5%, which was lower than the reported rates in literature (more than 10%). Fourteen other cases died of their pre-existing medical illnesses.

Upon epidemiological investigation, half of the cases recalled consumption of dairy products (including ice-cream, cheese and yogurt) or other high risk food such as raw food, salad and sandwiches during their incubation periods. However, no specific food items and food premises were identified as their source of infection. Food and environmental samples collected from cases' homes were all tested negative for *Listeria monocytogenes*. Except the above mentioned linked cases with both the mother and her baby infected, epidemiological linkage was found between two other cases. They were a 69-year-old man and his 37-year-old daughter who had history of consuming a ready-to-eat duck bought in mainland China. However, their source of infection could not be ascertained as the exact place where the duck was purchased was not recalled and no leftover food was available for testing.

Listeriosis is mainly related to consumption of food contaminated with *Listeria monocytogenes*, or transplacental transmission from mother to foetus. Elderly persons, pregnant women, newborns and those with immunocompromising illnesses are most vulnerable to the infection. Listeriosis usually presented with fever, malaise, myalgia, and sometimes with gastrointestinal symptoms such as vomiting and diarrhoea. Neurological symptoms such as headache, neck stiffness, loss of balance and confusion can occur with infection spread to nervous system. Pregnant women with infection may only experience a mild flu-like illness but may result in stillbirth and miscarriage, premature delivery and infection of the newborn. Since the bacteria can be found in natural environment and can tolerate low temperature, persons at risk should properly handle and avoid consuming high risk foods such as uncooked meat and vegetables, and processed food such as cheese and cold cuts that may be consumed without cooking or reheating.

The ages of the cases were distributed bimodally (Figure 3). Sixty-six cases (91.7%) were older than 20 years and most of them were older than 50 years old. Six other cases were less than 1 year old including 5 neonates. Males (35 cases) and females (37 cases) were equally affected.

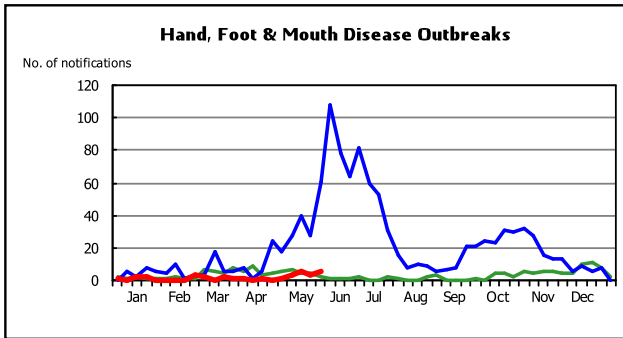
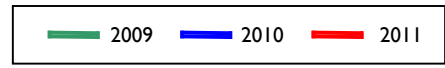
Most cases presented with non-specific symptoms such as fever, malaise, chills and headache.

Listeria monocytogenes were isolated from blood (58 cases), cerebrospinal fluid (CSF, 6 cases), both blood and CSF (2 cases), placental swabs (2 cases) and peritoneal fluid (4 cases who required regular peritoneal dialysis).

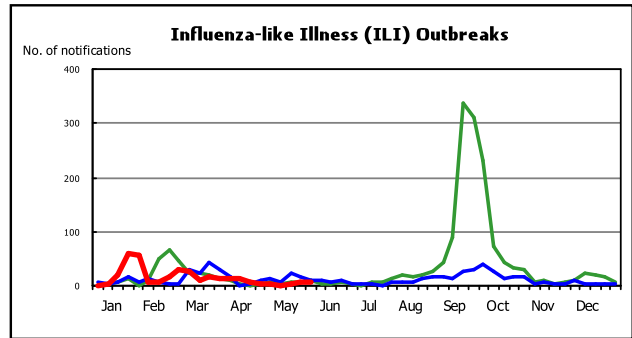
Among all the 72 cases, two-third of them had underlying chronic illnesses including diabetes mellitus and malignancies, or other immunocompromising conditions such as systemic lupus erythematosus, ulcerative colitis, pemphigoid, cirrhosis and renal failure.

Pregnant women and their foetuses were particularly susceptible to listeriosis. Eight of the cases were pregnant women aged 26 to 39 years (median 33.5 years) and presented with fever before or during delivery. Two of them had abortion due to intrauterine death at around 20 weeks of gestation. The other six women had their babies delivered in stable condition. One of the babies had *Listeria monocytogenes* isolated from blood culture and recovered after antibiotic treatment. The other 5 babies were

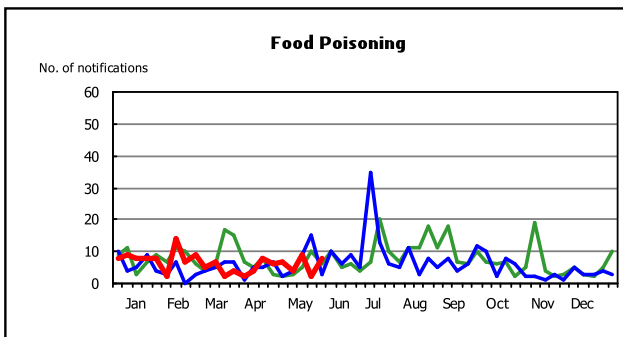
SUMMARY OF SELECTED NOTIFIABLE DISEASES AND OUTBREAK NOTIFICATIONS (WEEK 21 - WEEK 22)



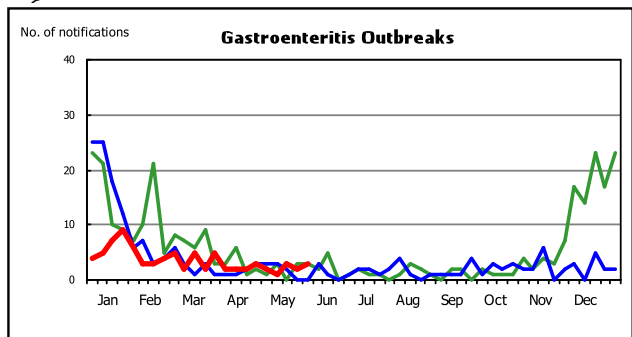
Week 19:	3	Week 21:	3
Week 20:	6	Week 22:	6



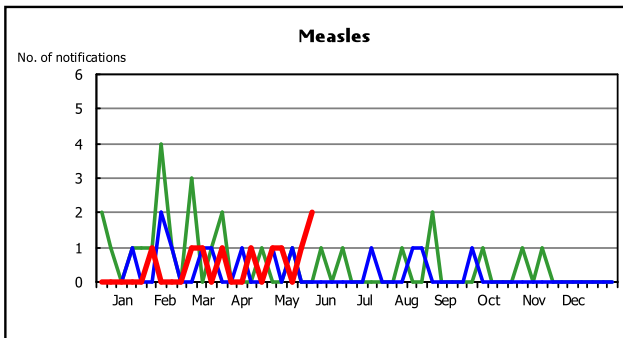
Week 19:	1	Week 21:	7
Week 20:	3	Week 22:	6



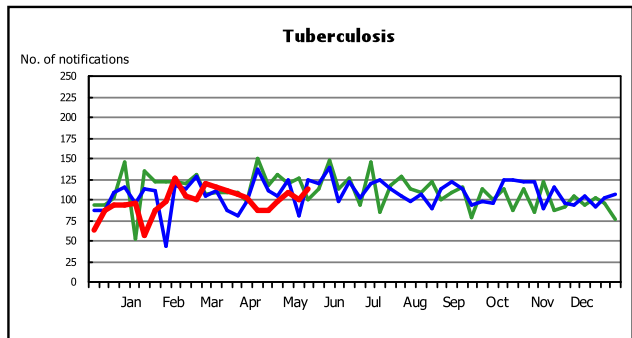
Week 19:	4	Week 21:	2
Week 20:	9	Week 22:	8



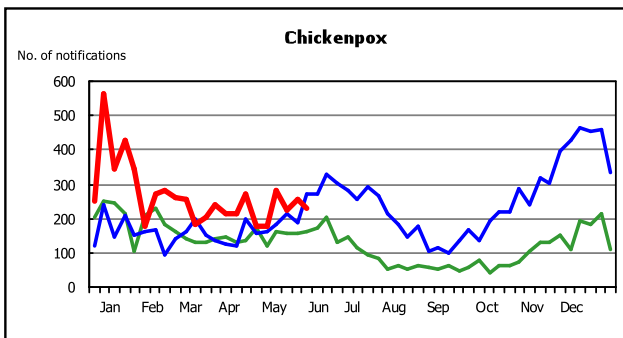
Week 19:	1	Week 21:	2
Week 20:	3	Week 22:	3



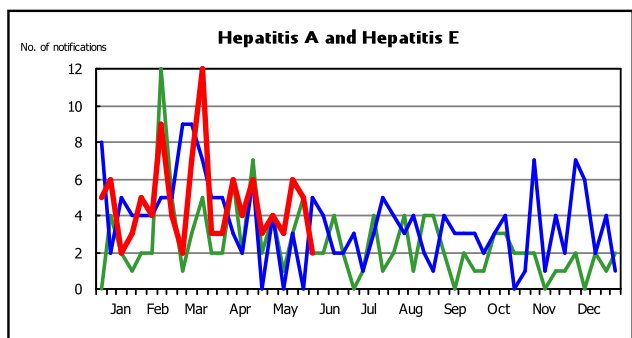
Week 19:	1	Week 21:	1
Week 20:	0	Week 22:	2



Week 19:	98	Week 21:	101
Week 20:	108	Week 22:	113



Week 19:	280	Week 21:	256
Week 20:	222	Week 22:	228



Week 19:	3	Week 21:	5
Week 20:	6	Week 22:	2

Data contained within this bulletin is based on information recorded by the Central Notification Office (CENO) and Public Health Information System (PHIS) up until May 28, 2011. This information may be updated over time and should therefore be regarded as provisional only.