



**Feature:**  
Recent increase in rubella infection in Hong Kong  
Update on local situation of hepatitis E



**LENS ON CHP**



Above: Public is reminded to stay vigilant against communicable diseases in the new school year.

**NEWS**

**A probable case of sporadic Creutzfeldt-Jakob Disease**

On August 16, 2011, CHP recorded a probable case of sporadic Creutzfeldt-Jakob disease (CJD) affecting a 58-year-old woman. She presented with dizziness and was admitted to a private hospital on July 24. MRI of brain showed features of encephalitis. EEG revealed typical features of CJD. She was transferred to a public hospital for further management on August 12. The patient had progressive dementia, myoclonus and pyramidal signs. She was

(continued on page 75)

**Recent increase in rubella infection in Hong Kong**

**Reported by DR YH TAM, Medical Officer, Surveillance and Epidemiology Branch, CHP.**

Rubella is a highly communicable viral infection characterized by fever, rash, lymph node swelling and respiratory symptoms. Although rubella infection is often mild in young children, older children and adults are more likely complicated with arthritis, encephalitis and orchitis. Infection in pregnant women in early gestation, especially during the first trimester, may cause death or a variety of congenital defects of the foetus, the congenital rubella syndrome (CRS).

This year, we recorded a high number of rubella cases. As of August 20, 2011, a total of 54 cases were notified to the Centre for Health Protection (CHP), exceeding the annual number of rubella infection recorded by CHP from 2005-2010, which was ranged from 34-53 (Figure 1). The monthly number of cases ranged from zero to 13 with slightly more cases recorded in spring and summer (Figure 2).

Below we summarized the epidemiological features of cases recorded since 2008. From 2008-2011 (as of August 20), a total of 172 cases of rubella were recorded.

More males than females were affected (male to female ratio = 1.7:1). The age of the patients ranged from 10 days to 52 years (median = 27 years). About 60% (103 cases) were adults aged 18 or above while 15% (25 cases) were below the age of one year.

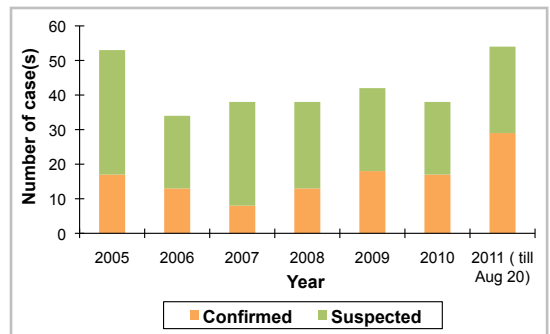


Figure 1 - Annual number of rubella cases, 2005-2011 (as of August 20, 2011).

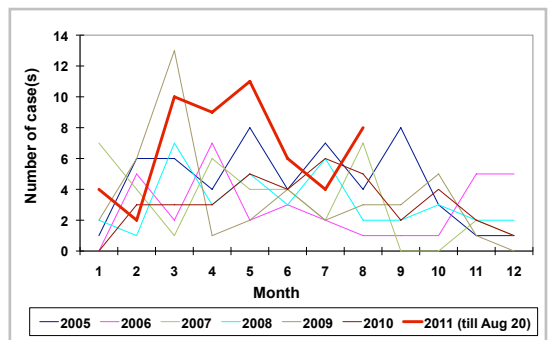


Figure 2 - Monthly number of rubella cases reported, 2005-2011 (as of August 20, 2011).

**EDITORIAL BOARD** Editor-in-Chief Dr SK Chuang **Members** Dr Christine Wong / Dr Monica Wong / Dr Eddie Sin / Simon Wong / Dr WC Kong / Dr TY Wong / Dr TS Lam / Dr YY Luk / Shirley Tsang / Fanny Ho **Production Assistant** Gladys Lo / Tracy Ho / Canary Ng. This publication is produced by the Centre for Health Protection (CHP) of the Department of Health, 147C, Argyle Street, Kowloon, Hong Kong **ISSN 1818-4111** All rights reserved Please send enquiries to [cdsinfo@dh.gov.hk](mailto:cdsinfo@dh.gov.hk)

Majority of the cases were locally acquired infection. Twenty-seven (16%) cases had history of travel outside Hong Kong (such as mainland China, Indonesia, the Philippines, the United Kingdom and Australia) during their incubation period and were classified as imported cases. Four clusters of cases were identified in 2009 (1), 2010 (2) and 2011 (1), affecting 2 to 4 persons in each cluster.

44% (76/172) of all cases were laboratory-confirmed by positive serological test for rubella IgM antibody or isolation of virus from blood or respiratory specimens. Skin rash and fever were the presenting symptoms reported by most of the laboratory confirmed cases. Lymphadenopathy, in particular to the post-auricular lymph nodes characteristic to rubella, was noticed in one-third of the cases. Around 58% of confirmed cases required hospitalization for rubella, with the duration ranged between 1 to 15 days (median = 4 days).

Comparing with cases recorded in 2008-2010, the median age of cases recorded this year was slightly older, with a higher proportion of males affected. Similar to previous years, most cases acquired the infection locally and majority the cases had not previously received vaccination against rubella (Table 1).

Table 1 - Epidemiological characteristics of confirmed rubella cases, 2008 to 2010 and 2011 (as of August 20).

Characteristics	2008-2010 (n=47)	2011 (as of August 20) (n=29)
Age range (median)	10 days to 51 years (30 years)	20 to 50 years (34.5 years)
Male to female ratio	1.8	3.1
Vaccinated against rubella (%)	5 (11%)	2 (7%)
Infection acquired outside Hong Kong (%)	13 (28%)	4 (14%)
Hospitalisation for rubella (%)	26 (55%)	18 (62%)

All cases recovered without complication except one case which affected a 10 days old boy in 2008. His mother had history of rash during pregnancy when staying in mainland China and had positive test for anti-rubella IgM antibody at 20 weeks of gestation upon antenatal check-up in Hong Kong. The boy's infection was confirmed by detection of rubella virus in respiratory specimen and urine after birth. As bilateral sensorineural hearing impairment was the only complication, this case was not classified as CRS.

From 2008-2011 (as of August 20), one case of CRS affecting a 14 days old boy born to a woman from mainland China was recorded in 2008. His mother had no known vaccination against rubella and had history of rash during first trimester of pregnancy. The newborn was found to have congenital heart anomalies, cataract and intraventricular haemorrhage compatible with CRS and confirmed by positive tests for anti-rubella IgM antibody and detection of rubella virus in respiratory specimen. He required intensive care and corrective surgery. His condition improved and he was discharged home about one month later.

Vaccination against rubella, which is the mainstay of prevention of rubella infection and CRS, was incorporated into the Hong Kong Childhood Immunisation Programme as anti-rubella vaccine and measles, mumps & rubella combined vaccine (MMR) since 1978 and 1990 respectively. Immunisation coverage in Hong Kong is persistently high. Data in 2009 showed that over 99% of children aged 2 to 5 and primary one students (around 6 years old) had received at least one dose of MMR.

Although rubella infection is usually uncomplicated, infection in non-immune women during early pregnancy can lead to serious outcomes in

(...cont'd)

therefore diagnosed as a probable case of CJD. Her current condition was stable. She had no known family history of CJD and had no risk factor for iatrogenic CJD or related disease.

#### A case of necrotizing fasciitis due to *Vibrio vulnificus*

CHP recorded a case of necrotising fasciitis caused by *Vibrio vulnificus* on August 19, 2011. The patient was a 51-year-old lady who had history of autoimmune disease. On August 15, she developed painful swelling of the left index finger after injury by a raw Mantis shrimp in a wet market. She was admitted to a public hospital the following day. Wound swab yielded *Vibrio vulnificus*. She was discharged after treatment with debridement and antibiotics.

#### Two epidemiologically-linked imported cases of dengue fever

On August 24 and 25, 2011, CHP recorded two epidemiologically-linked imported cases of dengue fever affecting two men, aged 35 and 62. The 35-year-old man presented with fever, headache, myalgia, retro-orbital pain and skin rash since August 15. He was hospitalised at a public hospital from August 18 to August 20 and recovered. The 62-year-old man had fever, headache, dizziness, vomiting and skin rash since August 12 and was hospitalised at another public hospital on August 17. He was also found to have rhabdomyolysis which was considered as an unusual manifestation of dengue fever. He recovered and discharged on August 24. Blood samples from both patients were tested positive for dengue virus type 1. These two patients had travelled to Cambodia together with 12 other group members from August 4-9 on a church service mission. The other group members were all asymptomatic.

(continued on page 76)

(...cont'd)

**CA-MRSA cases in August**

In August 2011, CHP recorded 55 cases of community-associated methicillin resistant *Staphylococcus aureus* (CA-MRSA) infection, affecting 34 males and 21 females aged between 1 and 67 years (median = 32 years). Among them were 38 Chinese, 8 Filipinos, 2 Nepalese, 1 American, 1 British, 1 Swiss, 1 Japanese and three of unknown ethnicity. The isolates of all 55 cases exhibited Panton-Valentine Leucocidin (PVL) gene and were positive for SCCmec type IV (41) or V (14). All cases presented with skin or soft tissue infection and were in stable condition. Among the cases, four were household contacts of 4 different cases confirmed in June 2011, July 2011, November 2010 and December 2010 respectively.

developing foetus. Women of child-bearing age who are not immunised should check their immunity status before pregnancy and receive rubella vaccine accordingly. Infected persons should avoid contact with pregnant women.

**Update on local situation of hepatitis E**

**Reported by DR JOANNA MH LEUNG, Medical Officer, and DR EDDIE SIN, Senior Medical Officer, Surveillance and Epidemiology Branch, CHP.**

The number of hepatitis E cases recorded had increased in Hong Kong in recent years (Figure 1). The annual notifications of hepatitis E infection increased from 19-38 cases during 2001-2005 to 34-118 cases during 2006-2010. Hepatitis E infection has become the most common viral hepatitis reported to CHP since 2008. A seasonal pattern was observed with more cases reported in the early months of the year (Figure 2). A similar rising trend of hepatitis E virus (HEV) infection was also observed in the neighbouring areas including mainland China, Japan, Singapore and Thailand.

In 2011, as of August 31, CHP recorded 93 cases, as compared with 85 cases in the first eight months in 2010. Of the 93 cases reported this year, 60 were males and 33 were females (male to female ratio = 1.82:1), with ages ranging from 23 to 84 years (median = 53 years). Common clinical presentations included tea-coloured urine (71%), jaundice (61%), anorexia (45%), vomiting (29%) and nausea (29%). About 80% of the cases required hospitalisation with a median length of stay of 7 days.

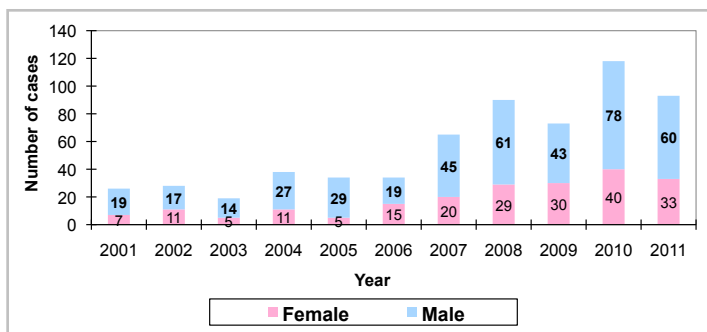


Figure 1 - Annual number of hepatitis E cases by sex, 2001-2011 (as of August 31, 2011).

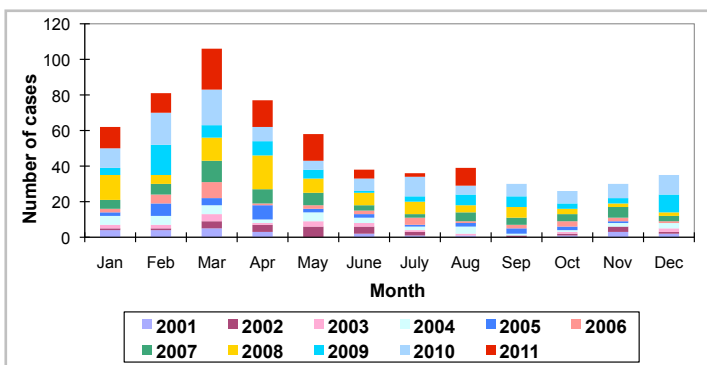


Figure 2 - Monthly number of hepatitis E cases, 2001-2011 (as of August 31, 2011).

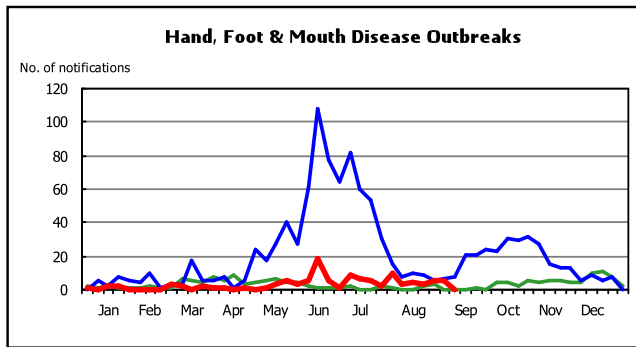
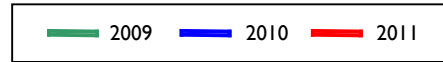
Hepatitis E is diagnosed in the presence of IgM anti-HEV. HEV RNA can be detected by polymerase chain reaction (PCR) in acute phase serum. Among the 60 viruses sequenced by the Public Health Laboratory in 2011, 59 belonged to genotype IV while one belonged to genotype I.

Among the cases recorded in 2011, one of them was a pregnant woman at her second trimester and she recovered uneventfully. No fatal case was recorded so far this year. All cases were sporadic infections, except for a couple (74-year-old man and 72-year-old woman), who shared most of their meals. No outbreak related to food premises was recorded so far this year. On reviewing the food history among hepatitis E cases recorded in 2011, about 45% and 33% of them recalled consumption of pig offals and shellfish during the incubation period respectively.

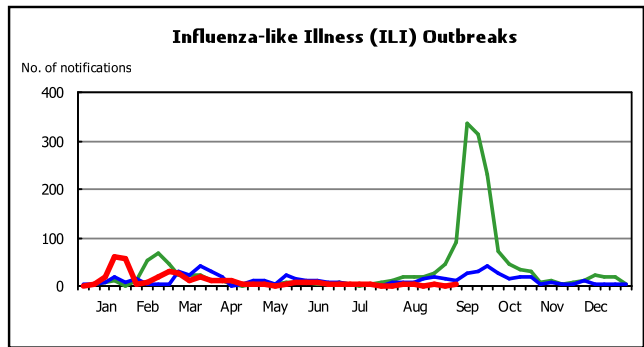
Hepatitis E is transmitted by faecal-oral route, mainly through consuming contaminated food or water. Foodborne transmission through consumption of raw or undercooked meat and shellfish has been documented. More cases of hepatitis E may be reported in the coming

months. The public is reminded to observe good personal and food hygiene practices in order to prevent the infection. Food, especially seafood, pork and pig offal, should be cooked thoroughly before consumption.

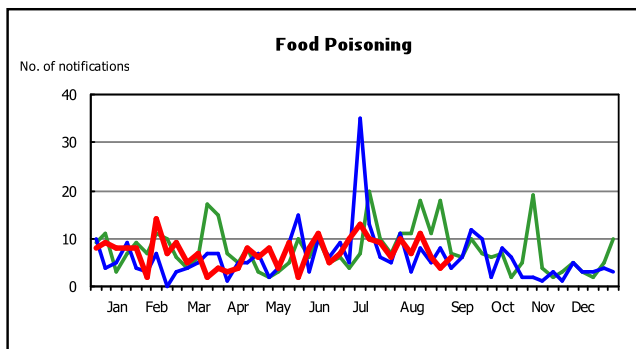
# SUMMARY OF SELECTED NOTIFIABLE DISEASES AND OUTBREAK NOTIFICATIONS (WEEK 35 - WEEK 36)



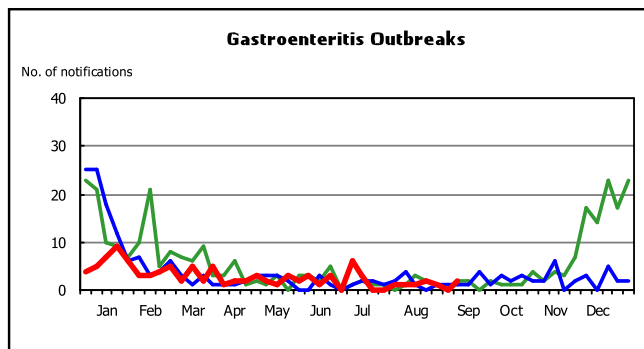
Week 33: 3      Week 35: 6  
Week 34: 6      Week 36: 0



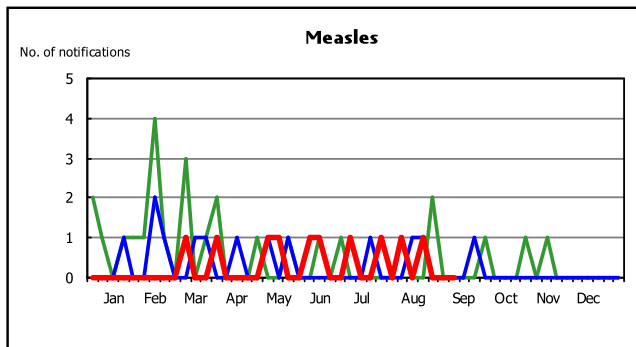
Week 33: 1      Week 35: 0  
Week 34: 2      Week 36: 2



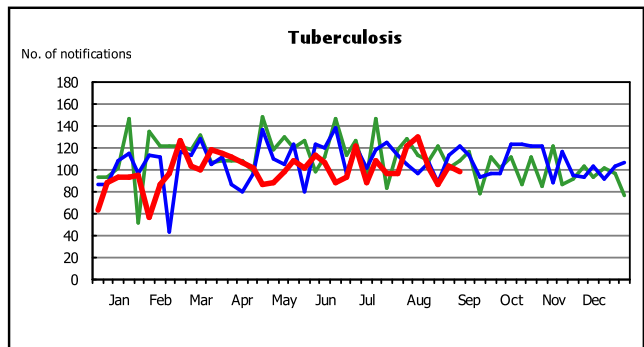
Week 33: 11      Week 35: 4  
Week 34: 6      Week 36: 6



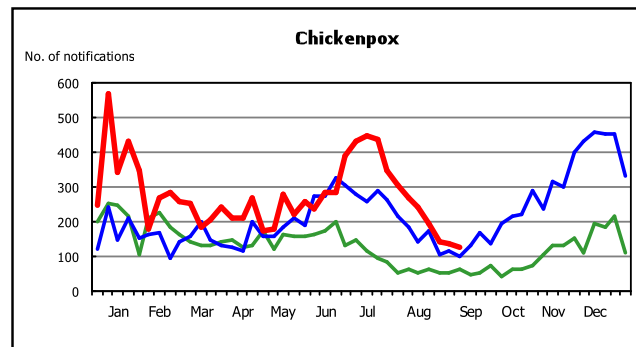
Week 33: 2      Week 35: 0  
Week 34: 1      Week 36: 2



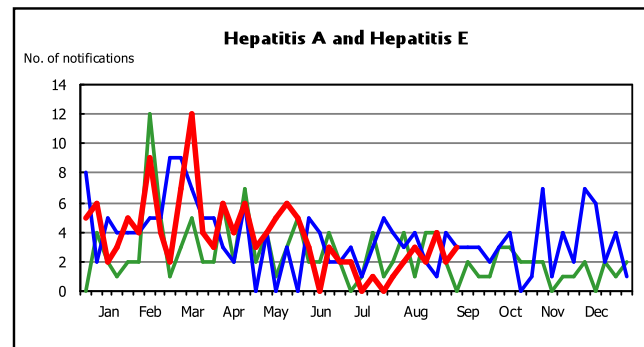
Week 33: 1      Week 35: 0  
Week 34: 0      Week 36: 0



Week 33: 102      Week 35: 103  
Week 34: 87      Week 36: 98



Week 33: 196      Week 35: 138  
Week 34: 143      Week 36: 128



Week 33: 2      Week 35: 2  
Week 34: 4      Week 36: 3

Data contained within this bulletin is based on information recorded by the Central Notification Office (CENO) and Public Health Information System (PHIS) up until September 3, 2011. This information may be updated over time and should therefore be regarded as provisional only.