



保障市民健康
Protecting Hong Kong's health



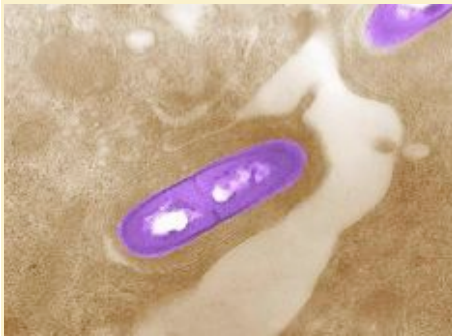
Department of Health
Hong Kong SAR

Features:

2008 Year in Review



LENS ON CHP



Above: An electron micrograph of a *Listeria* bacterium in tissue (stained). (Source: Public Health Image Library, CDC, US)

CA-MRSA cases in January 2009

In January 2009, the Centre for Health Protection (CHP) recorded 21 cases of community-associated methicillin-resistant *Staphylococcus aureus* (CA-MRSA) infection, affecting 12 males and 9 females aged between 10 and 62 years (median 37 years). Among them were 13 Chinese, three Filipinos, two British, one Pakistani, one Singaporean and one Sri Lankan. The isolates of all 21 cases exhibited Pantone-Valentine Leucocidin (PVL) gene and were positive for SCCmec type IV (14) or V (7). Among them there was one fatal case who had history of road traffic accident and suffered from pneumonia during his stay in hospital. The remaining 20 cases presented with skin or soft tissue infection. Four cases had

2008 Year in Review

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Highlights of communicable diseases in Hong Kong in the year 2008.

Community associated methicillin-resistant *Staphylococcus aureus* (CA-MRSA)

In 2008, we recorded 274 cases of CA-MRSA infection. Among them, 165 cases were male and 109 were female with ages ranged from 18 days to 87 years (median 33 years). Skin and soft tissue infections were the most common presenting conditions (99%) while four cases presented with invasive infections. One fatal case was recorded which involved a patient with terminal malignancy. Majority of the cases were Chinese (59%), followed by Filipino (14%), Caucasians (13%) and other/unknown ethnicities (14%). Altogether 15 family clusters affecting a total of 35 persons were identified in 2008. The size of the clusters ranged from 2 to 4 persons.

Enterovirus 71 infection and Hand, Foot and Mouth Disease

In 2008, we recorded 98 cases of enterovirus 71 (EV71) infection, the highest number in the past ten years. Majority (89.8%) of them were children aged ≤ 12 years old, while 72.4% of them were ≤ 5 years old. Over 90% presented with hand, foot and mouth disease (HFMD) while the rest presented with herpangina, flu-like symptoms or non-specific rash. Eleven cases (11.2%) had severe complications such as meningitis/encephalitis (6 cases), pneumonia (3 cases), shock (1 case) or acute flaccid paralysis (1 case). All recovered except a fatal case affecting an 11-month old baby boy with EV71 infection complicated with shock. The boy had onset of illness outside Hong Kong.

A total of 163 institutional HFMD outbreaks were reported in 2008 which was comparable to that reported in the past years (76 to 222 outbreaks in 2005 to 2007). HFMD was prevalent in May through July and a small peak was reported in winter months from October to December in 2008. Similar pattern was also noted in the preceding two years.

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Hepatitis E

We recorded 86 cases of hepatitis E in 2008, most (60%) were notified from January to April (Figure 1). The majority of the cases were adults with median age of 49 years old. More males were affected with a male-to-female ratio of 2.1:1. All were sporadic cases and no epidemiological link was identified. Despite majority of the cases (86%) required hospitalization, none was fatal.

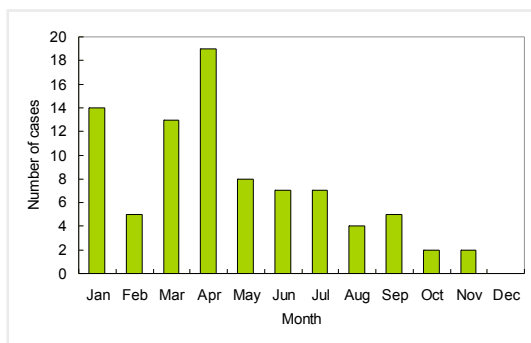


Figure 1 - Number of Hepatitis E notification by Month in 2008.

Influenza A (H9N2)

In 2008, we recorded a case of H9N2 infection affecting a 2-month-old girl. She was living in Shenzhen while she developed vomiting, cough and runny nose on December 20, 2008. She was admitted to a hospital in Hong Kong on December 22, and her nasopharyngeal aspirate was tested positive for H9N2. Laboratory investigation showed that all genes of the virus were of avian origin and there were no signs of increased risk for human-to-human transmission. Investigation by the health authorities of Guangdong revealed that a small number of chickens were kept in a food premises near the baby girl's home in Shenzhen. Human influenza A (H9N2) infection is not new to Hong Kong. Human cases were reported in 1999 (2 cases), 2003 (1 case) and 2007 (1 case). Unlike influenza A (H5N1) infection, H9N2 infections present with mild illness and full recovery is usually expected.

Legionnaires' disease

In 2008, there were 13 sporadic cases of Legionnaires' diseases (LD), which was within the range of 11-16 cases per year recorded in the previous three years. All except two were locally acquired infections. Two cases remained unclassified as they had trans-boundary movement during incubation period. All occurred between April and October. The majority of them were male (male-to-female ratio = 12:1) and they were aged between 41 and 85 years (median 61 years). All patients were hospitalized during their course of illness and six of them (46%) required intensive care. Eleven cases (85%) were diagnosed by positive urinary antigen tests and two by more than four-fold rise in serological titre. One patient, who was a chronic smoker as well as a chronic alcoholic, died of LD in 2008. No definite source of infection or epidemiological linkage was identified in these cases.

Listeriosis

In 2008, there were 17 cases of listeriosis reported to the CHP, among which 11 cases were reported after listeriosis was made notifiable under the Prevention and Control of Disease Ordinance (Cap. 599) in July 2008. These included seven women and ten men, aged between 3 days and 79 years (median: 60 years). Two-third of the patients had history of underlying chronic illness or immunocompromising condition such as systemic lupus erythematosus, renal failure and cancer. Four were pregnancy related cases, affecting a 39-year-old mother and her pre-term (29 weeks gestation) baby, a 34-year-old pregnant woman who required induced abortion for a nonviable fetus at 23 weeks of gestation and a neonate, whose mother was asymptomatic, presented with severe sepsis and multiple organ failure 5 days after birth.

(...cont'd)

recovered while sixteen were in stable condition. One case (M/60) was the husband of a CA-MRSA case confirmed in December 2008.

The number of CA-MRSA cases for December 2008 was revised to 28.

Two epidemiologically linked cases of listeriosis

On February 2, 2009, the Centre for Health Protection recorded two cases of listeriosis affecting a 37-year-old pregnant woman and her 69-year-old father. The woman lived in Mainland China and came to Hong Kong on January 21 at 38th week of gestation. She stayed with her parents and developed fever on January 26. She was admitted to hospital on January 28, received intravenous antibiotics treatment and delivered a pair of twin babies through induced labour on February 2. Her blood taken on admission subsequently grew *Listeria monocytogenes*. The twins showed no signs of neonatal listeriosis infection and their blood culture yielded negative growth. The woman recovered and was discharged from hospital.

Her father presented with right upper quadrant abdominal pain for a few days before he was admitted to hospital on January 29. On admission, he was found to have fever and antibiotics was started. He had known history of diabetes mellitus, hypertension and gout. The blood culture taken on admission grew *Listeria monocytogenes*. During hospitalization, he was diagnosed to have biliary tumour and his condition was stable.

Before admission, the woman and her father shared several meals at home with her mother. Her mother remained asymptomatic all along and her stool yielded no growth of *Listeria monocytogenes*.

There was one fatal case of listeriosis involving a 63-year-old woman who had history of end stage renal failure requiring continuous ambulatory peritoneal dialysis. Two other patients died of other underlying illnesses. All other patients were recovered.

Except the abovementioned mother and her pre-term baby, no epidemiological linkage was identified among other cases. Laboratory test on available food samples and environmental swabs collected from patients' homes were all negative for *Listeria monocytogenes*.

Seasonal influenza

In 2008, we experienced two seasonal peaks of influenza, a winter peak from late February to March and a summer peak from July to August. There were a total of 130 confirmed influenza outbreaks affecting 46 (35.4%) primary schools, 37 (28.5%) elderly homes, 23 (17.7%) child care centres/ kindergartens, 6 (4.6%) special institutions, 5 (3.8%) secondary schools, 5 (3.8%) hospitals and 8 (6.2%) other institutions. The number of persons affected in each outbreak ranged from 3 and 57 (median=7). Most outbreaks during the winter peak occurred in schools and pre-primary institutions while elderly homes were mostly affected in the summer peak. In 2008, the Public Health Laboratory Centre of CHP detected 4 622 influenza virus isolates from clinical specimens. Among them, 36%, 34% and 30 % of these isolates were influenza A (H1N1) viruses, influenza A (H3N2) viruses and influenza B viruses respectively (Figure 2).

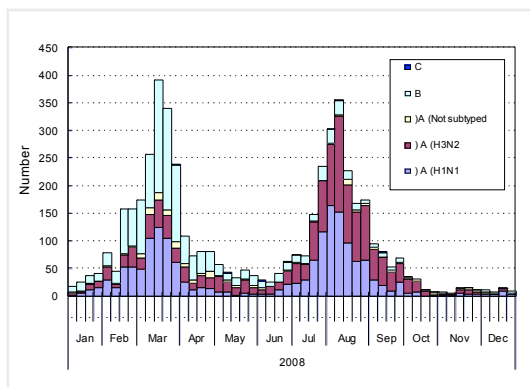


Figure 2 - Influenza virus detections (Laboratory surveillance), 2008.

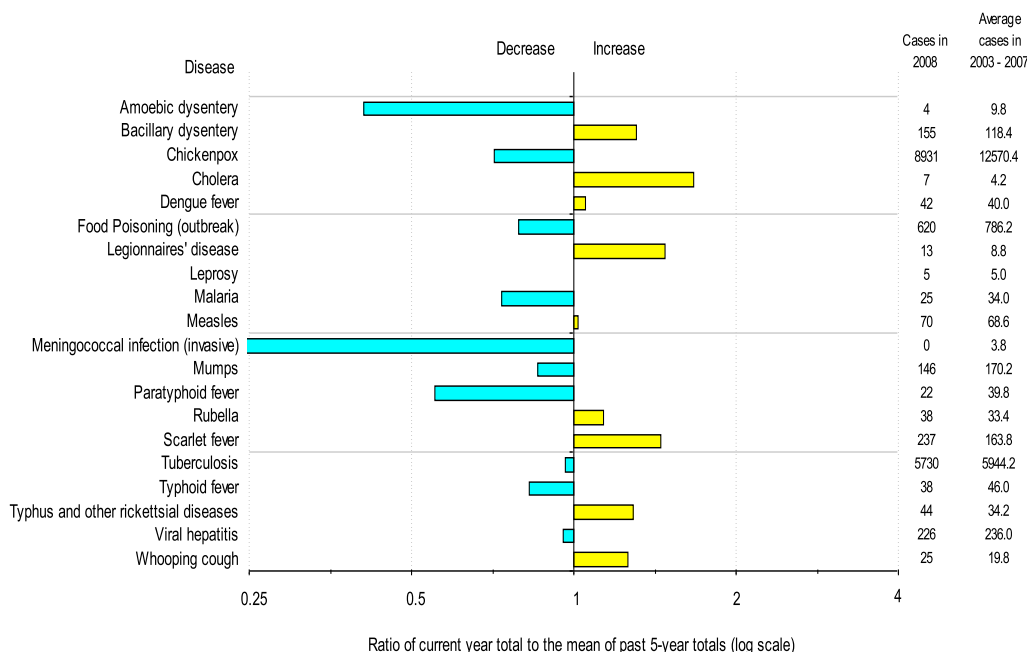
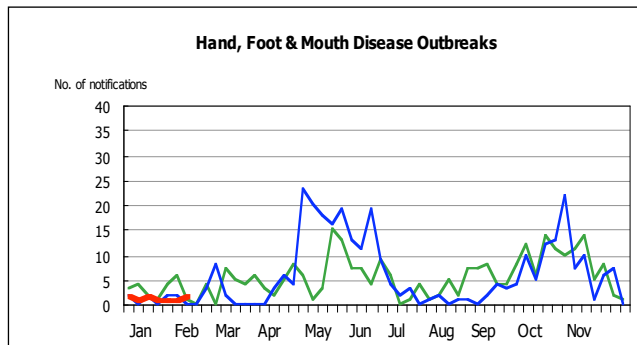
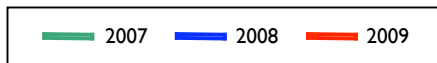


Figure 3 - Deviation in number of notifications of selected notifiable communicable diseases*, 2008 vs 2003-2007.

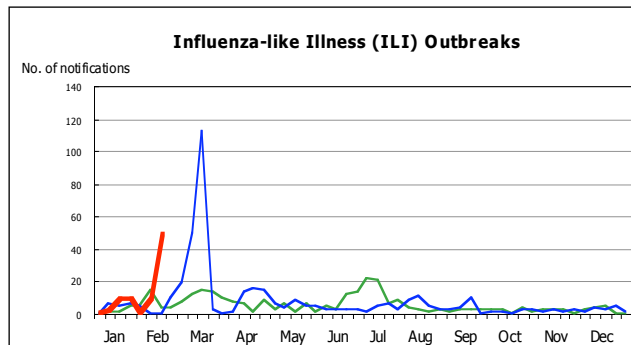
Notes:

- (1) * Only diseases with adequate numbers (total number of cases during 2003-2007 > 10) of notifications over time are presented. Figures for 2008 are provisional.
- (2) Limitation: When the number of notifications in the reference period is small, the deviation can be drastic and should be interpreted with care.
- (3) Source of data: Public Health Information System and Central Notification Office for Communicable Diseases.

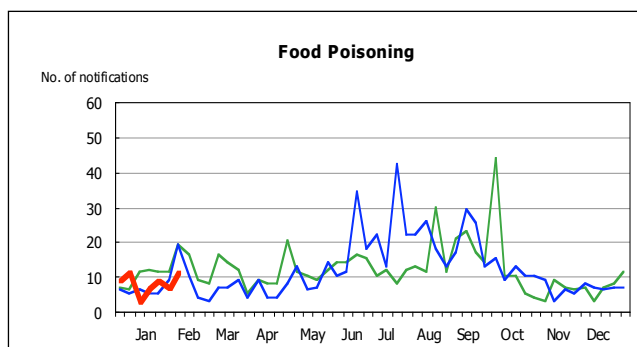
SUMMARY OF SELECTED NOTIFIABLE DISEASES AND OUTBREAK NOTIFICATIONS (WEEKS 6 - 7)



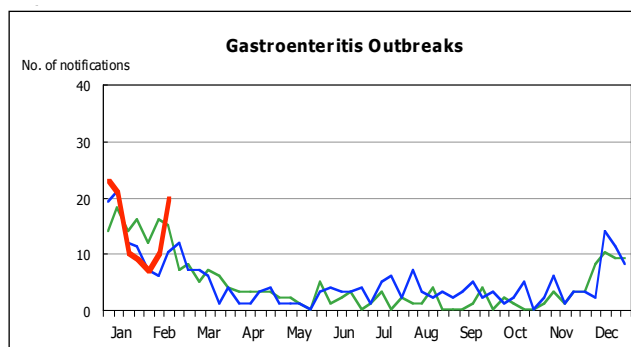
Week 4:	1	Week 6:	1
Week 5:	1	Week 7:	2



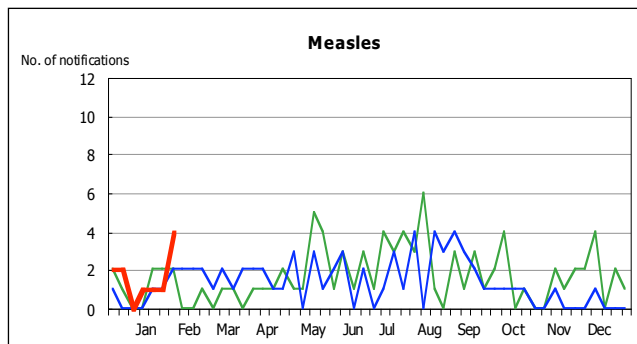
Week 4:	10	Week 6:	10
Week 5:	1	Week 7:	49



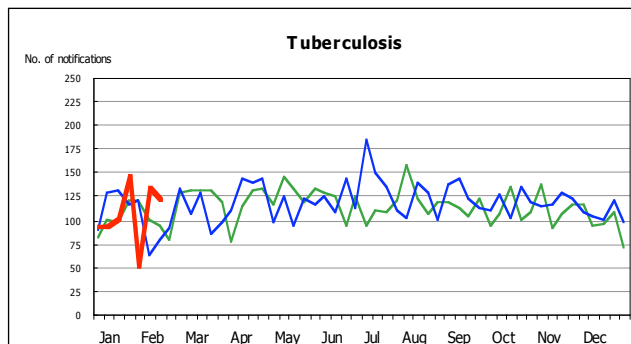
Week 4:	7	Week 6:	7
Week 5:	9	Week 7:	11



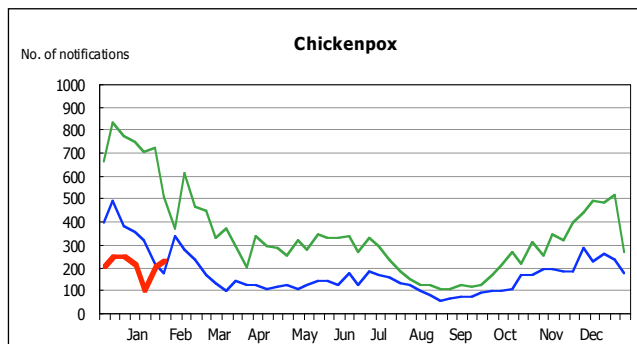
Week 4:	9	Week 6:	10
Week 5:	7	Week 7:	20



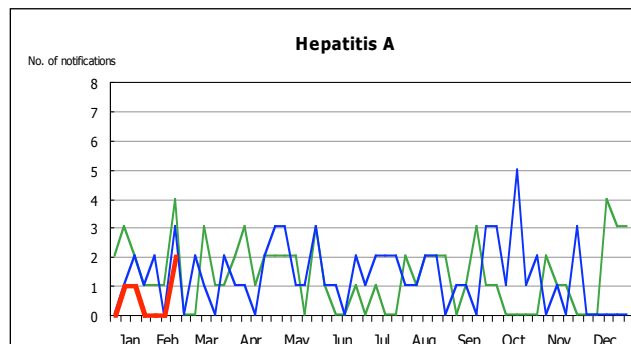
Week 4:	1	Week 6:	1
Week 5:	1	Week 7:	4



Week 4:	146	Week 6:	135
Week 5:	52	Week 7:	122



Week 4:	216	Week 6:	208
Week 5:	105	Week 7:	227



Week 4:	0	Week 6:	0
Week 5:	0	Week 7:	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 February 14, 2009. This information may be updated over time and should therefore be regarded as provisional only.