Disease Surveillance

Disease surveillance enables the health authority to identify prevailing incidence and trends of diseases, to conduct timely investigation, and to formulate and implement intervention strategies. In Hong Kong, systematic disease surveillance for infectious diseases and cancer is in place.

疾病監察

疾病監察有助衞生當局確定當前的疾病發病率及趨勢，從而作出適時調查，以及制定和推行針對策略。目前，香港對傳染病及癌病均已設立有系統的監察機制。

Infectious Diseases

傳染病

Notifiable Infectious Diseases

須呈報的傳染病

According to the Quarantine and Prevention of Diseases Ordinance (Cap.141), there were 31 notifiable infectious diseases in 2006 (Table C). Among these, cholera, plague and yellow fever are quarantinable diseases. Medical practitioners are required to notify the Department of Health of all suspected and confirmed notifiable infectious diseases. The Department of Health will conduct surveillance and initiate control and prevention of the infectious diseases.

根據《檢疫及防疫條例》(第141章)，在二零零六年本港共有31種須呈報的傳染病(表C)。當中，霍亂、瘟疫及黃熱病屬須檢疫的疾病。醫生均須向衞生署呈報懷疑及證實屬須呈報傳染病的個案，以便衞生署進行傳染病監察及防控工作。

A total of 22 449 cases of infectious diseases were notified in 2006. The number increased by 11.8% as compared with 20 081 cases in 2005. The top five diseases in terms of the number of notifications in 2006 were chickenpox (14 415 cases), tuberculosis (5 766 cases), food poisoning (1 095 outbreaks with 4 145 persons affected), viral hepatitis (235 cases) and scarlet fever (230 cases). Chickenpox and tuberculosis accounted for 64.2% and 25.7% of all notifications respectively.

二零零六年，共有22 449宗須呈報傳染病個案，較二零零五年的20 081宗增加11.8%。以呈報宗數計，首五類傳染病為水痘(14 415宗)、結核病(5 766宗)、食物中毒(1 095宗，涉及4 145人)、病毒性肝炎(235宗)及猩紅熱(230宗)。水痘及結核病分別佔所有呈報個案的64.2%及25.7%。

Table C : List of Notifiable Infectious Diseases, 2006
表C ：二零零六年須呈報的傳染病

Cholera 霍亂	Japanese Encephalitis 日本腦炎	Scarlet Fever 猩紅熱
Plague 瘟疫	Legionnaires' Disease 退伍軍人病	Severe Acute Respiratory Syndrome 嚴重急性呼吸系統綜合症
Yellow Fever 黃熱病	Leprosy 麻風	*Streptococcus suis* Infection 豬鏈球菌感染
Acute Poliomyelitis 急性脊髓灰質炎(小兒麻痺)	Malaria 瘧疾	Tetanus 破傷風
Amoebic Dysentery 阿米巴痢疾	Measles 麻疹	Tuberculosis 結核病
Bacillary Dysentery 桿菌痢疾	Meningococcal Infections 腦膜炎雙球菌感染	Typhoid Fever 傷寒
Chickenpox 水痘	Mumps 流行性腮腺炎	Typhus 斑疹傷寒
Dengue Fever 登革熱	Paratyphoid Fever 副傷寒	Viral Hepatitis 病毒性肝炎
Diphtheria 白喉	Rabies 狂犬病	Whooping Cough 百日咳
Food Poisoning 食物中毒	Relapsing Fever 回歸熱	
Influenza A(H5), Influenza A(H7) or Influenza A(H9) 甲型流行性感冒(H5)、甲型流行性感冒(H7)或甲型流行性感冒(H9)	Rubella 風疹(德國麻疹)	

Chickenpox

There were 14 415 notifications of chickenpox in 2006. The number increased by 20.8% as compared with 11 933 cases in 2005. Similar to previous years, the majority (78.5%) of cases occurred among children aged under ten.

水痘

二零零六年，呈報的水痘個案有14 415宗，較二零零五年的11 933宗增加20.8%。一如往年，大部分個案(78.5%)的病患者均為十歲以下的小童。

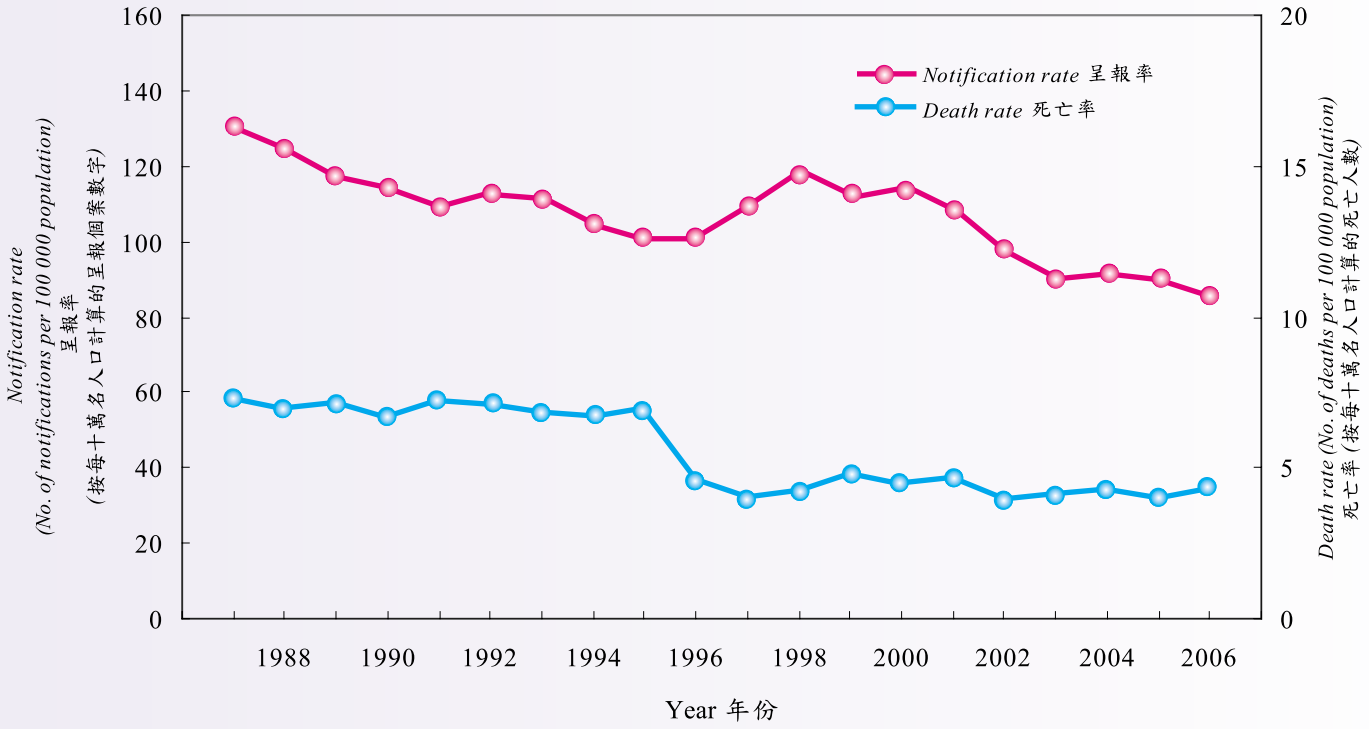
Tuberculosis

In 2006, the number of tuberculosis notifications was 5 766 and the notification rate was 84.1 per 100 000 population. Compared with 2005, the number of notifications decreased by 6.4% and the notification rate decreased by 7.0%. (Figure 8)

結核病

二零零六年，呈報的結核病個案有5 766宗，而呈報率是每十萬名人口有84.1宗。跟二零零五年比較，呈報個案數字減少了6.4%，而呈報率則減少了7.0%。(圖8)

Figure 8 : Notifications and Death Rates of Tuberculosis, 1987 - 2006
圖8 : 一九八七年至二零零六年結核病呈報率及死亡率



Viral hepatitis

There were 235 notifications of viral hepatitis in 2006, of which 76 were hepatitis A, 123 were hepatitis B, two were hepatitis C and 34 were hepatitis E. Compared with 2005, the number of notifications for hepatitis A and hepatitis B increased by 18.8% and 17.1% respectively.

病毒性肝炎

二零零六年，病毒性肝炎呈報個案有235宗，其中76宗為甲型肝炎，123宗為乙型肝炎，兩宗為丙型肝炎及34宗為戊型肝炎。跟二零零五年比較，甲型肝炎及乙型肝炎的呈報個案數字分別增加了18.8%及17.1%。

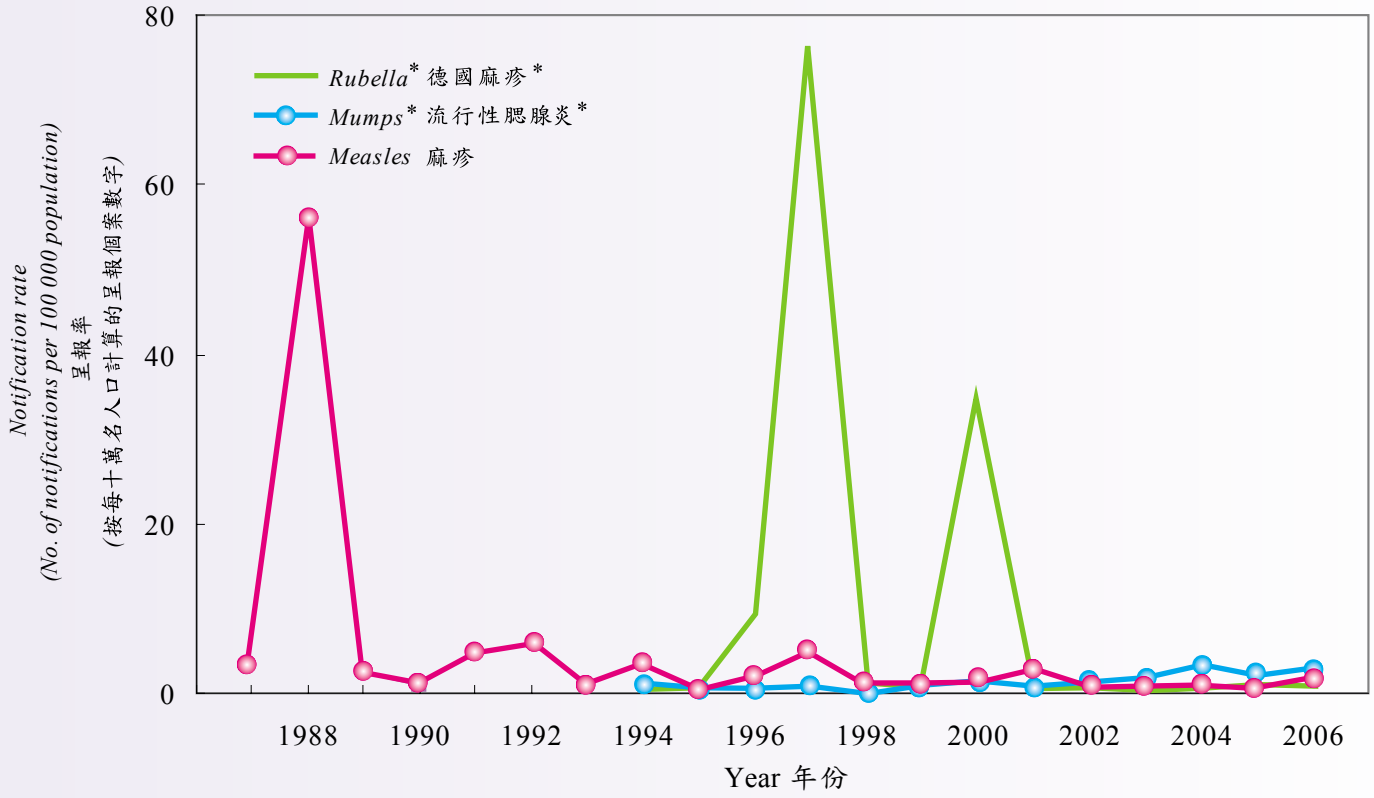
Vaccine preventable diseases

There were 184 cases of mumps, 106 cases of measles, 34 cases of rubella, 21 cases of whooping cough and two cases of tetanus notified to the Department of Health in 2006. The number of notifications of vaccine preventable diseases remained low in 2006. The coverage rates of vaccines included in the childhood immunisation programme were very high. The trends of selected vaccine preventable diseases are shown in Figure 9.

疫苗可預防的疾病

二零零六年，衞生署共接報184宗流行性腮腺炎、106宗麻疹、34宗德國麻疹、21宗百日咳及兩宗破傷風呈報個案。該年，疫苗可預防疾病的呈報數字維持在低水平。而在兒童免疫接種計劃中，各疫苗的覆蓋率均處於非常高的水平。圖9顯示選定的疫苗可預防疾病的趨勢。

Figure 9 : Notification Rates of Selected Vaccine Preventable Diseases, 1987 - 2006
圖9 : 一九八七年至二零零六年選定的疫苗可預防疾病的呈報率



Notes: Case definition for mumps has been changed in 2003.
* Notifiable since 1994.
註: 流行性腮腺炎於二零零三年採用新的病例定義。
* 由一九九四年起須呈報的疾病。

Foodborne diseases

In 2006, there were 1 095 notifications of food poisoning outbreak, with 4 145 persons affected, 140 cases of bacillary dysentery, 46 cases of typhoid fever, 39 cases of paratyphoid fever and one case of cholera.

Bacteria remained the major cause of food poisoning outbreaks, accounting for 76.5% of all outbreaks. Twenty-six percent of all outbreaks were laboratory-confirmed and the three most common causative agents were *Vibrio parahaemolyticus* (40.5%), *Salmonella* species (19.4%) and *Staphylococcus aureus* (19.0%). Food poisoning caused by chemicals or biotoxins was also reported. There were 27

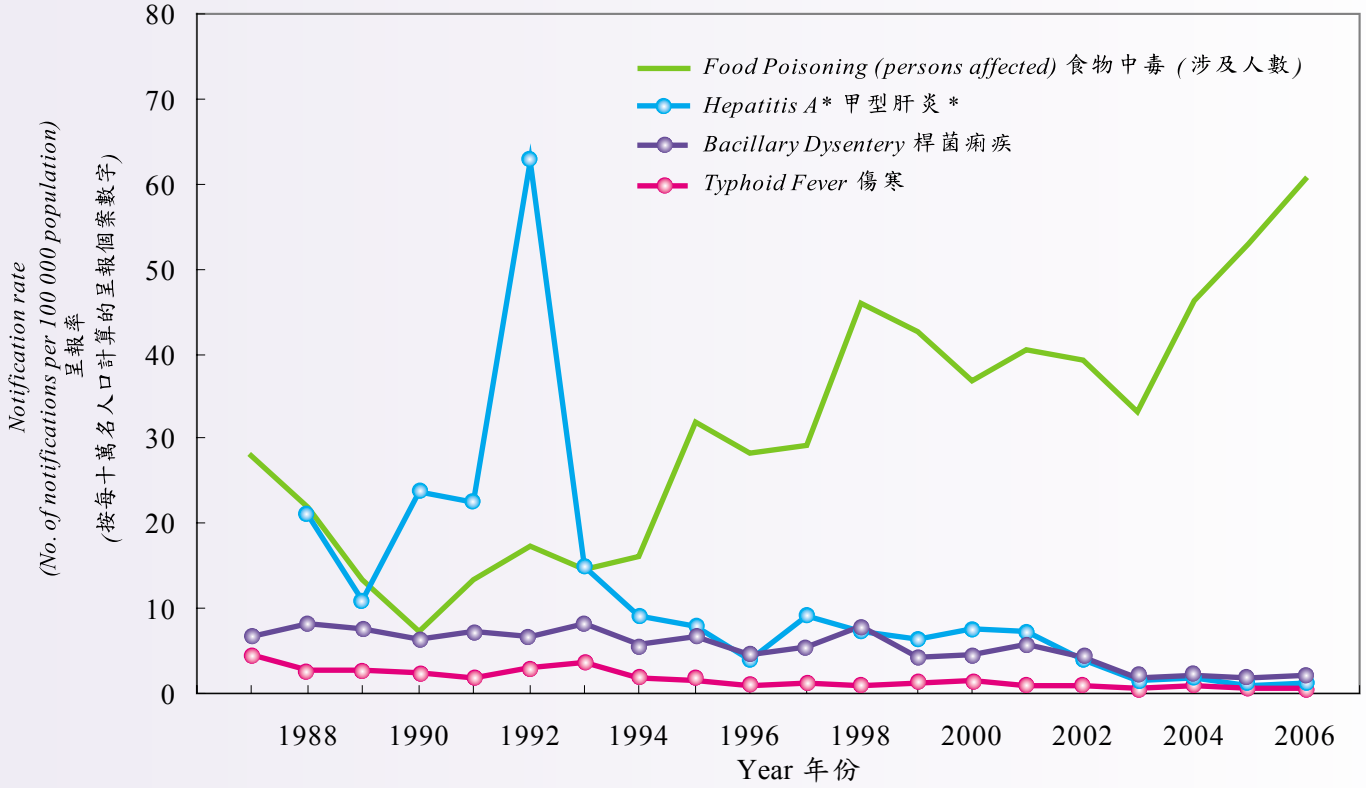
食物傳播的疾病

二零零六年，共有1 095宗食物中毒呈報個案，涉及4 145人；另有140宗桿菌痢疾、46宗傷寒、39宗副傷寒及一宗霍亂的呈報個案。

細菌仍然是引致食物中毒的主因，佔所有爆發個案的76.5%。經由實驗室證實的個案佔所有呈報的26.0%。最常見的三種致病原是副溶血性弧菌(40.5%)、沙門氏菌(19.4%)及金黃色葡萄球菌(19.0%)。另外，呈報個案中亦有由化學物或生化毒素引起的。由雪卡毒引起的爆發個案有27宗(涉及66人)。圖10顯示選定的食物傳播疾病的趨勢。

outbreaks (66 persons affected) caused by ciguatera toxin. Figure 10 shows the trends of selected foodborne diseases.

Figure 10 : Notification Rates of Common Foodborne Diseases, 1987 - 2006
圖10 : 一九八七年至二零零六年常見的食物傳播疾病的呈報率



Note : * The classification of Hepatitis A has been available since 1988.
註 : * 甲型肝炎的分類數字由一九八八年起提供。

Vector-borne diseases

There were 31 dengue fever cases reported in 2006. All were imported from Asian countries, with cases from Indonesia and Thailand together contributed 58% of the total.

As for malaria, 40 cases were reported in 2006. Fifteen cases were caused by *Plasmodium falciparum*, 23 were by *Plasmodium vivax* and two by *Plasmodium malariae*. All malaria cases in 2006 were imported with 30 cases from Asia, eight from Africa and one from Central America. The remaining one had visited to both Africa and Asia.

傳病媒介傳播的疾病

在二零零六年，登革熱呈報個案有31宗。全部個案屬於亞洲國家傳入，而印尼及泰國佔所有傳入個案的58%。

至於瘧疾，二零零六年的呈報個案有40宗，其中15宗由惡性瘧原蟲引起，23宗由間日瘧原蟲引起，其餘兩宗由三日瘧原蟲引起。二零零六年的所有個案均由外地傳入，當中，30宗源自亞洲，八宗源自非洲及一宗源自中美洲，餘下一宗個案曾到訪非洲及亞洲地區。

In 2006, there were 24 reported cases of typhus with 20 scrub typhus and four urban typhus.

二零零六年，斑疹傷寒呈報個案有24宗，其中20宗為叢林斑疹傷寒，另四宗為城市斑疹傷寒。

Japanese encephalitis became a statutorily notifiable disease on 16 July 2004. No case was reported in 2006.

日本腦炎於二零零四年七月十六日列為法定須呈報的傳染病。二零零六年，沒有感染個案呈報。

Other Infectious Diseases

其他傳染病

Surveillance systems have also been set up to monitor other infectious diseases or conditions with public health importance such as human immunodeficiency virus (HIV) infection, influenza-like illness, hand, foot and mouth disease, acute conjunctivitis and acute diarrhoeal diseases, as well as antibiotic resistance.

政府已設立監察系統，監控對公共衞生有重要影響的其他傳染病及疾病，例如愛滋病病毒感染、流感類病症、手足口病、急性結膜炎(紅眼症)和急性腸道傳染病，以及細菌抗藥性。

The HIV surveillance programme of the Department of Health has an important role in monitoring the trend of HIV infection for formulating healthcare and prevention programme. The programme collects data regularly through voluntary reporting, sero-prevalence monitoring of selected groups and unlinked anonymous screening. All personal information is kept confidential. At the end of 2006, the number of reported HIV and Acquired Immune Deficiency Syndrome (AIDS) cases were 3 198 and 855 respectively. Sexual transmission continues to be the most important mode of spread of the infection.

衞生署愛滋病監察計劃對當局監察愛滋病病毒感染的趨勢，從而制定護理和預防計劃十分重要。這項計劃透過自願呈報、監察選定組別人士血清中帶有病毒抗體的普遍率和非聯繫不記名檢查，定期搜集有關資料。所有個人資料均會保密。至二零零六年年底，已呈報的愛滋病病毒感染個案有3 198宗，愛滋病個案則有855宗。性接觸傳染仍然是最重要的傳播模式。

A sentinel surveillance system is in place in Hong Kong to monitor influenza-like illness, hand, foot and mouth disease, acute conjunctivitis, acute diarrhoeal diseases and antibiotic resistance. The system operates through the support of a network of 64 General Out-Patient Clinics in the public sector and 41 doctors in the private sector.

香港設立了定點監測系統，以監察流感類病症、手足口病、急性結膜炎（紅眼症）、急性腸道傳染病及細菌的抗藥性。這個系統是通過64間公營的普通科門診診療所及41名私家醫生的網絡運作。

Results of the influenza-like illness sentinel surveillance system showed that the most prevalent strain of influenza virus during the year 2006 was *Influenza A H1N1*. The peak months in 2006 were from January to March and June to July.

流感類病症定點監測系統的監察結果顯示，二零零六年最常見的流感病毒類型為甲型(H1N1)病毒，發病高峰期為一月至三月及六月至七月。

The hand, foot and mouth disease sentinel surveillance programme was established in 1998 to monitor the trend of hand, foot and mouth disease and *Enterovirus-71* infection in Hong Kong. The peak months in 2006 were from April to July and November.

手足口病定點監測計劃於一九九八年設立，以監察手足口病及腸病毒71型感染的發病趨勢。在二零零六年，發病高峰期為四至七月及十一月。

Sentinel surveillance on acute conjunctivitis and acute diarrhoeal diseases was implemented in July 2001 to monitor the disease trend and identify the causative agents of these two diseases. For acute conjunctivitis, consultation rates remained stable in 2006, and only slight increases in disease activities were noted in May and August. The common causative agents identified were *Haemophilus influenzae* and *Staphylococcus aureus*.

急性結膜炎(紅眼症)及急性腸道傳染病定點監測計劃於二零零一年七月推行，以監察這兩種疾病的趨勢，並確定其病原體。在二零零六年，急性結膜炎(紅眼症)的求診率保持平穩，只在五月及八月期間出現輕微上升。常見的致病原是流感嗜血桿菌及金黃葡萄球菌。

Sentinel surveillance on antibiotic resistance was established in 1999 to monitor the trend of antibiotic resistance at the community level. The target group is out-patients who have not had antibiotic therapy during the seven days before sampling. Nasal swabs, throat swabs, mid-stream urine and stools are collected. The results are regularly released at websites of the Department of Health, as well as the Centre for Health Protection, for reference by medical and dental practitioners in Hong Kong.

細菌的抗藥性定點監測計劃在一九九九年設立，以監察在社區層面細菌的抗藥性趨勢。其對象是於取樣前七日沒有服用抗生素的門診病人。樣本包括鼻腔分泌物、喉嚨分泌物、中段尿液和糞便。有關結果定期在衞生署及衞生防護中心的網站公布，供本港的醫生及牙醫參考。

Apart from medical General Out-Patient Clinics and private medical practitioners, two other sentinel surveillance systems have been set up since 2005 to monitor various syndromes so as to strengthen surveillance of infectious diseases. A surveillance system based at 57 elderly homes was established to monitor trends of fever, diarrhoea and vomiting and related hospitalisation among institutionalised elders. Another system based at 46 Child Care Centres was set up to detect trends of syndromes (including fever, cough, diarrhoea and vomiting) and absenteeism, as well as monitoring trends of acute conjunctivitis and hand, foot and mouth disease. The results are regularly released at websites of the Centre for Health Protection, for reference by all sectors.

為加強傳染病監測，自二零零五年起，除普通科門診及私家醫生的定點監測系統外，衞生署更設立安老院舍及幼兒中心的定點監測系統。前者通過57間院舍監測安老院舍長者出現發燒、急性腹瀉及嘔吐的情況及因該病徵而入院的趨勢；後者則透過46間幼兒中心，監測幼童病徵(發燒、咳嗽、腹瀉及嘔吐)及因病缺席的趨勢，並監測急性結膜炎及手足口病的趨勢。有關結果定期在衞生防護中心的網站公布，供各界人士參考。